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Part II — Roy I. Brown

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TABLE OF CONTENTS

Editorial 1
Hy I. Day
Kathryn A. Boschen

Locus of Control in Blind Adults 5
K.A. Boschen
H.I. Day
J. Smith

Preliminary Results from the Rehabilitation Programmes Study 15
R.I. Brown
M.B. Bayer
C.M. MacFarlane

Adaptation of the Micro-Tower for use with Canadian Psychiatric Clients 31
Hy Day
Terry Krupa

Facilitation of Teaching and Learning: What Professors, Students with a Physical Disability and Institutions of Higher Education Can Do 45
Catherine S. Fichten
Claudia V. Bourdon
Laura Creti
John G. Martos

Assertiveness Training for Disabled Individuals in Wheelchairs: An Initial Evaluation 71
Robert L. Glueckauf
Ross G. Stockwell
Alexandra L. Quittner

Employment Outcome in a Sample of Canadian Closed Head Injury Patients 87
Pamela S. Klonoff
William G. Snow

An Analysis of Role Salience and Values in an Allied Health Profession 97
H.M. Madill
L.L. Stewin
E.S.G. Brintnell
G.W. Fitzsimmons
D. Macnab

The Use of Relaxation and Imagery with Rheumatoid Arthritis 113
David Prendergast
Keith Wood

The Need for a Broad and Functional Definition of Employability 121
Jane Staub

Family Adjustment to Closed-Head Injury: Implications for Rehabilitation Counselling 137
James W. Vargo
Terry Karpman
Sandra Wolfe

Systematic Desensitization as an Adjunct to Vocational Training in a Case of a Developmentally Handicapped Elective Mute 149
Peter A. Wyngaarden
Joanna Christensen
John R. Davis
Charles E. Cunningham

Phenomenology of Quadriplegia: A Useful Approach in Rehabilitation 161
Georgette Desjean
Thérèse Doucet

Rehabilitation, Professional Practice and Changing Directions 169
Roy I. Brown

Social Support and its Implications for Counselling Disabled People 183
Sharon E. Robertson

The Rehabilitation Practitioner: A Rural Perspective 211
Terrance N. James

Counselling the Family with a Handicapped Member 227
Peter R. Johnson

The Experience of Unemployment of the Physically Disabled 245
William A. Borgen
Norman E. Amundson
Pamela M. Biela

Developing Life Skills Training for Special Clienteles: Institutionalized Offenders as a Case in Point 261
T.J. Segger
D.B. Plecas

A Model for Evaluating Rehabilitation Programs: The Case Example of the St. John's Job Generation Project 273
Michael J. Holosko

Researching Practice: An Examination of Ten Years of Specialized Training for Moderately and Severely Mentally Handicapped Adults 311
Gerrit Groeneweg
Mirna I. Vrbancic
Gordon Littlejohns

Employability Assessment of Disabled or Disadvantaged Persons: Predictive Validity and Expectancy Tables for Two New Decision-Making Aids 325
Robert J. Flynn
Barbara Dubuc
David R. Vincent

Disabled Youth in Transition: Implications for Social Action Approaches for Rehabilitation Counsellors 353
Nancy J. Marlett

NATCON GUEST EDITORIAL

It is with pleasure that we bring you this Special Issue of NATCON devoted to Rehabilitation Research. This publication represents a unique event and a unique combination of efforts, as it is the first multidisciplinary journal issue that deals exclusively with Canadian research in the field of rehabilitation as far as we know.

The articles presented here have been carefully selected from across the country and from the various professions which are involved in the provision of rehabilitation services. As you will discover, the styles and contents of the papers are quite different. This variety is deliberate, as we did not intend to impose any particular uniformity on the submissions in our role as editors. Rather we saw ourselves as catalysts and organizers of an issue of articles whose only common features would be that they are Canadian, rehabilitation research-related in content and high-calibre in quality.

This issue is comprised entirely of original research papers, none of which has been presented at the annual NATCON Ottawa conference. In the majority of cases the articles represent the product of team efforts, often consisting of interdisciplinary groups of researchers. This team approach is typical of the rehabilitation field in general. Rehabilitation is clearly cross-disciplinary in nature. The United Nations World Programme of Action Concerning Disabled Persons (1983), adopted by the U.N. General Assembly in December 1982, defines the term in the following way:

> "Rehabilitation means a goal-oriented and time-limited process aimed at enabling an impaired person* to reach an optimum mental, physical and/or social functional level, thus providing her or him with the tools to change her or his own life." (p. 3)

It is obvious that in order to achieve this stated goal of rehabilitation, many different professional disciplines should ideally be involved in the process, as well as para-professionals and peer groups of disabled individuals. Contributions to the field of rehabilitation research should reflect this broad base of involvement within the rehabilitation process.

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* See WHO definitions in their International Classification of Impairments, Disabilities, and Handicaps, World Health Organization, Geneva, 1980.

The present issue is not truly interdisciplinary, as it does not include any contributions from the field of medicine. This occurred not through oversight but out of consideration for the typical readership of NATCON, a vocational counselling journal, and out of the desire to maintain inter-issue consistency with the vocational counselling approach of other issues of NATCON.

D. Stuart Conger, the NATCON Editor, has been kind enough to invite us to coordinate this Special Issue, facilitating the publication of work which typically remains unpublished in this country. One of the reasons for this situation is the conspicuous absence of a Canadian professional journal of rehabilitation research. We are convinced that there is more research conducted in Canada suitable for publication than we have tapped into here, although most of it may never reach the printed journal page.

It is our fervent wish to see Canadian rehabilitation research encouraged, supported, and disseminated among those interested professionals, para-professionals and individuals with disabilities in the rehabilitation community. We consider this NATCON Special Issue to be the first step towards that end. As a second step, we have joined with others in working towards the possible establishment of a Canadian journal of rehabilitation research.

To this end we are currently developing plans for the publication of a separate supplementary issue of Rehabilitation Digest, the journal of the Canadian Rehabilitation Council for the Disabled. This issue, like the present one, will contain a selection of original research studies conducted by Canadian rehabilitation professionals. It is planned for publication at the end of 1986, after which we will seek funding for an ongoing national interdisciplinary professional journal, if there is sufficient demand to warrant such an endeavour.

Comments, suggestions and indications of interest regarding this project would be most welcome and much appreciated. We are also interested in hearing from individuals who may be potential contributors or who would like to be placed on the mailing list to receive copies of the forthcoming rehabilitation research publication.

Hy I. Day
Kathryn A. Boschen

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World Programme of Action Concerning Disabled Persons. New York: United Nations, 1983. (Reprinted with the permission of the United Nations by the Status of Disabled Persons Secretariat, Secretary of State, Ottawa, 1984, Cat. No. S2-135/1984).

LOCUS OF CONTROL IN BLIND ADULTS

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ABSTRACT

The locus of control concept has rarely been investigated with blind individuals. The intent of the present study was to examine locus of control orientation of a sample of blind adults to determine if a difference exists between congenitally and adventitiously blind persons, and between blind and sighted individuals. The results found no such differences, leading to the speculation that expectations of differences simply reflect our tendency to inappropriately attribute certain personality characteristics to all blind individuals. The suggestion is made that it is far preferable to treat each blind person as a unique individual rather than as a member of a particular disability group having certain presumed common personality attributes.

LOCUS OF CONTROL IN BLIND ADULTS

While the concept of locus of control is well known in the psychology literature, it appears to have been almost ignored in its application to the field of rehabilitation. A small number of studies using this paradigm have been conducted with spinal cord injured adults (Boschen, 1984; Dinardo, 1971; Meyerson, 1968; Swenson, 1976), and even fewer have addressed the issue of locus of control as it relates to blind individuals. (See Land & Vineberg, 1965, and Roessler & Boone, 1979, for a discussion of locus of control in blind children.) The purpose of the present research was to assess locus

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This study was conducted under the supervision of the first and second authors, by the third author as a B.A. Honours thesis for the York-Seneca Rehabilitation Services Program.

of control of a number of blind adults in order to see whether there is a difference between congenitally and adventitiously blind persons and if there is a difference between blind respondents and sighted adults.

The locus of control construct developed out of the work in social learning theory carried out by Rotter in the 1950's and 1960's (Rotter, 1954, 1966). It appears that individuals can be placed on a continuum based on the extent to which they feel that events in their lives are influenced by their own actions versus being influenced by external forces or circumstances beyond their control. Those whom Rotter labelled as "internals" are characterized by the belief that they basically exert control over what happens to them in life. "Externals", on the other hand, feel that events in their lives are determined by sources greater than or outside of themselves, such as God, luck, fate, or powerful others.

Rotter developed a locus of control scale, consisting of 29 forced-choice items, to measure individuals' control orientations. Each item provides an internal and an external choice of explanations for various events which occur in life (e.g., "Many of the unhappy things in people's lives are partly due to bad luck" vs. "People's misfortunes result from the mistakes they make"). The scale is scored in the direction of externality. A higher score therefore (range 0-23) indicates a more external locus of control orientation.

The concept of locus of control is relevant to blind people for several reasons. First, it can be postulated, based on general evidence related to the positive effects of having an internal locus of control orientation (Lefcourt, 1976; Perlmuter & Monty, 1979), that blind individuals who are more "internal" in their beliefs will be more likely to be successful rehabilitation clients, because they feel that they can determine, through their own efforts, what will become of them in life. Second, there is research evidence linking locus of control and job satisfaction among the general population (Day, 1985), and thus it can be reasonably expected that such a relationship would also exist among blind persons. Third, it is important for rehabilitation counsellors to consider that differential approaches to working with their blind clients may be appropriate, which take into account the individuals' personal expectations regarding the amount of control they exert over the circumstances of their lives.

It was hypothesized that congenitally blind individuals would have more external locus of control orientations, as measured by the Rotter (1966) locus of control scale, than those who had become adventitiously blind later in life. Support for this hypothesis can be found in the developmental psychology literature (Jan, Scott & Freeman, 1977), where the impact of lack of sight on the child's evolving self-concept has been examined. The speculation is advanced that congenitally blind children are separated from their surroundings due to their lack of vision, and thus hold different expectations regarding the environment and their ability to have an impact on it. Jan et al. (1977) state that there is a great risk for blind children to develop problems of dependency, passivity, and lack of initiative.

Families may tend to be more overprotective of blind children, who in turn come to rely on others to do things for them. As a result, feelings of competency and mastery over the environment may be impaired during the developmental process. Such basic early experiences would be expected to influence the development of a personality characteristic such as locus of control orientation, and thus one would expect to find that as adults, congenitally blind individuals would feel less in control of their lives than those who were sighted as children.

An individual's self-perception is a crucial factor in governing the way he or she tries to come to terms with problems and opportunities in personal and working life. Meighan (1971) examined the self-concept of visually handicapped adolescents and discovered clear weaknesses in this area among many of these young people. Using the Tennessee Self-Concept Scale, Meighan demonstrated that the scores for the majority of his visually handicapped subjects showed a distinctly negative self-image. Miller (1970) conducted a study where the Hardy Anxiety Scale was used to test self-confidence in social competency, personal appearance, and adjustment to blindness. His findings supported the need for increased specialized training and understanding of the blind person's needs in social situations.

Scott, author of The Making of Blind Men (1976), believes that the dynamics of personality development and of the social functioning of a congenitally blind person are substantially different from those of someone who is adventitiously blinded. Scott's theory is that the disability of blindness is a learned social role. Patterns of behaviour are not inherent to the condition of blindness that causes a person to be docile, dependent, melancholic, or helpless. This is a learned phenomenon. The basic thesis of his book is that blindness is a social role which the blind must learn how to play.

Scott maintains that there are certain views held by society which affect the way the blind person is treated and which in turn affect the way the blind person feels about him or herself. And as he correctly points out, "However erroneous existing stereotypes about blindness may be, they are nevertheless real. No blind man can ignore them and for most they are central contingencies of his life. ... Basically, to the extent that these beliefs and assumptions are internalized, they become a part of the blind man's self-concept" (Scott, 1976).

The literature and studies cited about support the view that congenitally blind individuals could be expected to be more externally oriented in their behaviour and attitudes than non-blind individuals. It also follows that those who have had the experience of being sighted prior to becoming blind might more closely resemble the non-blind with regard to their locus of control orientations. Congenitally blind persons are affected from the very beginning of their lives by the developmental and self-concept issues and by the societal and personal role expectations discussed above, and could therefore be expected to have more external locus of control scores than adventitiously blind individuals.

The Study

The research participants used in this study were 60 adults between the ages of 18 and 65 who were registered with the Canadian National Institute for the Blind (C.N.I.B.) in Toronto as being legally blind. Those with low vision or borderline vision registration were omitted. Also omitted were any individuals who had mention on their files of mental retardation or a developmental disability.

Half of the participants had been blind at or within three months of birth, and the other half had become blind adventitiously (through accident or disease) later in life. For this latter group, the restriction was imposed that they must have been legally blind for at least a year at the time of the data collection. The intention was to eliminate or decrease the possibility that individuals were still in the acute stages of adjusting to recent blindness, which might be expected to at least temporarily affect locus of control scores.

The names of potential research participants were selected at random from a series of files in the Vocational Rehabilitation Department of the C.N.I.B. Toronto Branch. After an initial screening of files based on the above-mentioned criteria, individuals who qualified were contacted and invited to take part in the research. Those who agreed were asked for several pieces of demographical information (present age, age at onset of blindness, level of education, and whether or not they had gone to a regular or a special school as children), and were then given the Rotter (1966) locus of control scale.

This instrument is usually self-administered (i.e., individuals fill out the 29-item questionnaire on their own, at their own speed). Under the circumstances however, the items were read aloud to each participant and the answer choices recorded by the researcher. This method of administration was chosen over the use of a braille version of the scale because blind individuals typically have varying degrees of competence in using braille. The participants were then asked the following supplementary questions:

1) Did you ever feel that you were "expected" to behave in a certain way because you were blind?

2) Did your family reinforce these "expectations", or did they strive to make you independent?

3) Are you identifiable (meaning having a guide dog, or carrying a white cane) as blind by other people?

Results

The congenitally blind group was significantly younger than the adventitiously blind ($t = 3.06$, $p < .05$), with a mean age of 29.9 years and a range of 18-52, compared to a mean of 38.5 and a range of 19-63. For those with adventitious blindness, the mean age at its onset was 20 years old, but the range varied greatly, from a low of one year to a high of 49 years at onset. There was no difference between the two groups in education level (M = Grade 11.0 for the congenitally blind and 11.2 for the adventitiously blind; $t = 0.66$), but one third of the former group had gone to a special school while only one-sixth had from the latter group.

The mean locus of control score for the congenitally blind group was 10.2, with a range in scores from 6 to 18. For the adventitiously blind group the comparable figures were 9.3 and 2 to 15. These means do not differ significantly from those typically cited for non-blind adults (Lefcourt, 1976), thus indicating that the present sample of legally blind adults hold locus of control orientations which are not dissimilar from those of

TABLE 1

Comparison of Congenitally and Adventitiously Blind Respondents

	Congenitally Blind	Adventitiously Blind	
Number of respondents	30	30	
Average present age	29.9	38.5	t = 3.06*
Average years of education	11.0	11.2	t = 0.66
Type of school:			
Special	10	5	
Regular	20	25	$x^2 = 2.22$
Perceived expectation re blind role			
Yes	13	15	
No	17	15	$x^2 = 0.27$
Family encouraged independence			
Yes	22	21	
No	8	9	$x^2 = 0.08$
Identifiable as blind			
Yes	13	18	
No	17	12	$x^2 = 1.67$
Locus of control score	10.2	9.3	t = 1.07

* $p < .05$

sighted individuals. Nor was there any statistically significant difference in the locus of control scores between the congenitally and adventitiously blind groups (t = 1.07). Thus the hypothesized difference in locus of control orientations between these two groups was not supported. Responses on the three supplementary questions failed to show any differences between the two groups. All the results reported above are presented in Table 1.

Discussion

In fact, the results of this study should come as no great surprise and should serve to cause the rehabilitation counsellor to reexamine frequently accepted "truisms" about the blind as well as other disadvantaged groups. There is a tendency to lump people with disabilities together and endow them with personality characteristics that are expected to include all the members of the group. This is true also for minority groups where the tendency is to endow all members with racial stereotyping. Wright (1983) terms this devaluation and describes it as the patronizing attitude towards people with disabilities in which these persons are considered to be inferior in behaviour and in valued personality traits and so more unfortunate.

Cameron, Titus, Kostin & Kostin (1973) have pointed out that people with disabilities and their able-bodied counterparts are hardly distinguishable in overall adjustment or in life satisfaction. Barker, Wright, Meyerson & Gonick (1953), in an early study summarized 15 studies of personality inventories with blind subjects and showed that while six studies found evidence for greater maladjustment among the blind, the other nine studies failed to identify significant differences. In fact, in some of these studies, the same tests produced different results. Tests of goal-setting behaviour and level of aspiration measures also fail to identify differences between disabled and non-disabled people consistently.

There may have been research problems associated with the collection of the present data - as there are with many research studies. The sample may not have been representative of the population of blind adults because of sampling errors, definitional weaknesses in the distinction between congenital and adventitious blindness, or the tendency for some people to respond in a socially desirable direction on questionnaires. These problems could also have served to affect other studies in similar or opposite ways.

Yet, it is fairly clear that the expectation of finding significant differences in locus of control between blind and sighted adults, or between those with congenital and adventitious blindness, may be grounded in our own prejudices and may lead us to endow these groups with non-existent personality characteristics. It is far more useful not to assume such differences and to treat each blind person as an individual with his or her own unique set of personality characteristics.

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PRELIMINARY RESULTS FROM THE REHABILITATION PROGRAMMES STUDY*

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Introduction

Research in the field of rehabilitation in developmental handicap has accumulated since the early 1950's, and falls basically into four major areas:

1) changes that have been recorded in the cognitive development of mentally handicapped persons (e.g. Clarke & Clarke, 1974),

2) data relating to the survival and community living of mentally handicapped people over a period of years (e.g. Edgerton, 1967),

3) changes in programme strategies which have arisen and are believed to have influence on learning efficiency (e.g. Feuerstein, 1979), and

4) the development of clinical evidence associated with severe conditions of brain injury from birth or during the developmental years which suggest that major changes occur in development despite the impact of genetic or physical organic damage (e.g. Smith, 1983).

But despite the changes that have been observed there is still considerable doubt about what precipitates change and what processes can be developed to improve the variety of programmes that now exist across Canada. The Rehabilitation Programmes Study was undertaken to address such questions as: Are fewer mentally handicapped people being rehabilitated into the community? If so, is this due to (a) a change in the populations being served, (b) the return of many people who had been rehabilitated to institutions, or (c) changes in economy and attitudes within the community which make it difficult for rehabilitation to be carried out efficiently? Any changes in the rate of rehabilitation may relate to a combination of these and other factors.

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* This paper is based on data from the Rehabilitation Programmes Study based at the Vocational and Rehabilitation Research Institute, which is supported by National Welfare Grants Programme, Health and Welfare Canada through Grant Number 4558-29-4. The views expressed are those of the authors.

A primary aim of our research is to understand better the lifestyles of handicapped men and women and the impact rehabilitation services have in modifying their dependence. We are interested in obtaining information on the success of handicapped persons in the community from a variety of social and vocational perspectives. Further, there are a number of other important issues that the Study addresses. For example, is rehabilitation being carried out in sufficient domains? Are programmes sufficiently "individual oriented" that the best use is made of finances in promoting services in this area?

The Rehabilitation Programmes Study, begun in October, 1982, is a longitudinal study concerned with an examination of the performance and quality of life of developmentally handicapped adults. It is also concerned with the social and financial aspects of rehabilitation effectiveness, including examination of the agencies providing the rehabilitation services. The Study involves 240 handicapped men and women who receive services from five training centres in Western Canada.

The Research

Design

Individual measures relating to each client's behaviour and skills were obtained. Assessments of clients' concerns and perceptions, as well as those of their sponsors (generally parents) were recorded in relation to quality of life. Assessments of work and residential environments were also collected.

The research model was a modified time series design which involved the "presence of a periodic measurement process on some group ... and the introduction of an experimental change into this time series of measurements, the results of which are indicated by a discontinuity in the measurements recorded in the time series" (Campbell & Stanley, 1963, p. 37). Behavioural, social, and economic data were collected longitudinally at regular intervals (two years of data have been collected so far). Each data collection period provided baselines from which to gauge the effect of the rehabilitation programme as well as subjective and objective measures of the quality of life of the handicapped persons in these programmes.

Agencies and Clients

Each of the five agencies in Western Canada which participated in this project was characterized as an adult vocational training agency which services a comprehensive range of clients and emphasizes placement and follow-up of these persons in the community. Most of the clients were mildly to moderately handicapped in cognitive skills, and multiple handicap was very common. A few were of low average to average cognitive ability. Their ages ranged from 18 to 45+ years though most were in their twenties. Three of the agencies were situated in major cities, while the other two were located in much smaller centres.

This project utilized the concept of "action research", the merits of which are outlined elsewhere (Whelan, Speake & Strickland, 1984; Mittler, 1977; Lewin, 1946). This approach to research reduces the gap between research findings and their application in rehabilitation agencies. Unfortunately, according to Blunden and Evans (1984) the use of this concept has not been widely adopted.

In this Study agency personnel were consulted to negotiate the role the research team and their staff would assume. The research team met on a number of occasions with the relevant decision-makers, i.e. board members, management personnel, frontline staff, parents and sponsors, to update them on the progress of the study, to share results of the study and to address their concerns. We also formulated an advisory committee of agency representatives to react to the Study.

Quality of Life and Rehabilitation Effectiveness

Quality of life was defined as the discrepancy between the person's achieved and their unmet needs and desires, the assessment of which included clients' subjective or perceived account of their living conditions across various life domains as well as objective evaluations of these environments. Rehabilitation effectiveness of a programme in achieving given goals of rehabilitation was measured in terms of social efficiency, service outcomes, and financial efficiency.

Instruments used in the Rehabilitation Programmes Study

A range of assessment instruments were employed, but only those relevant to this discussion are briefly described here.

1) Adaptive Functioning Index: The Adaptive Functioning Index (Marlett, 1971) measures behaviours considered necessary for independent functioning. It consists of three separate programme units, which are the social-education objective test and the vocational and the residential checklists. All but one of the five participating agencies used the Adaptive Functioning Index on a regular basis and in-service workshops were provided to ensure inter-rater reliabilities were maintained at an 80% standard. The Vocational and Social Education Adaptive Functioning Index was completed by frontline staff each year the client attended the agency. The Residential Adaptive Functioning Index was completed in agencies that had a residential component. After a client left an agency, the Social Education Adaptive Functioning Index was collected each year.

2) Client Yearly Assessment Form: For each client, assessments of number, type, and duration of training programmes, residential placements, and job placements, plus programme attendance figures were supplied by agency personnel.

3) Client Quality of Life Questionnaire: Individual structured interviews were conducted with clients once a year. They were asked to evaluate their lives in a number of domains, which included: residential, health, leisure, self image, financial management, marriage, interpersonal and legal involvement. Clients appeared to enjoy these occasions to discuss their lives and in many cases were very candid and articulate in expressing their views.

4) Parent/Sponsor Quality of Life Questionnaire: Questionnaires similar to those used with clients were mailed once a year to parents or sponsors. Considerable time was taken by the research team to interview parents via the

telephone and in face-to-face sessions when it was necessary. The results of these questionnaires from the research team's perspective were vital since they were a reliability measure for the information obtained from the client and provided another informed and sensitive assessment of the client's quality of life. Although some parents were initially a little anxious about completing the questionnaire, the feedback regarding the usefulness of our research and of the questionnaire has generally been positive. One parent suggested that this questionnaire provided a structure by which he could obtain information from an agency and it assisted him in taking an active rather than a passive role as a member of the programming team.

Results

An analysis of the Level of Handicap Grid (Marlett, 1975) indicates that the greatest handicap for the clients was in the area of socialization and communication, and likewise an examination of the Adaptive Functioning Index (Marlett, 1971) records shows particular problems in social and home-living skills with relative strengths in aspects of unskilled and semi-skilled vocational performance. These data which are stable from one year to the next provide interesting commentary when responses from parents and sponsor questionnaires are examined. Figure 1 shows the percentage of males and females who are said to require assistance in various skills. It will be noted that housekeeping, planning menus, buying groceries, budgeting, making minor equipment repairs (such as replacing a lightbulb), all show a need for training and a high level of supervision. The clients view themselves somewhat differently but the theme is fairly consistent.

An examination of leisure activities is shown in Figure 2. An analysis of these activities show that they conform fairly closely to Nash's view (1953) of Level 1-4 activities in this domain. The activities most enjoyed and participated in appear to be those which we might describe as concrete, whereas major physical activity and abstract, or self-actualizing activities, lie at a relatively low level. Most people are isolated observers -- in our view a serious concern where social competency is involved.

Within the first year of the Study a two percent people monthly placement figure (see Table 1) was

FIGURE 1

Responses from Parent Sponsor Questionnaire -- Year 1
Needs Supervision and not Responsible

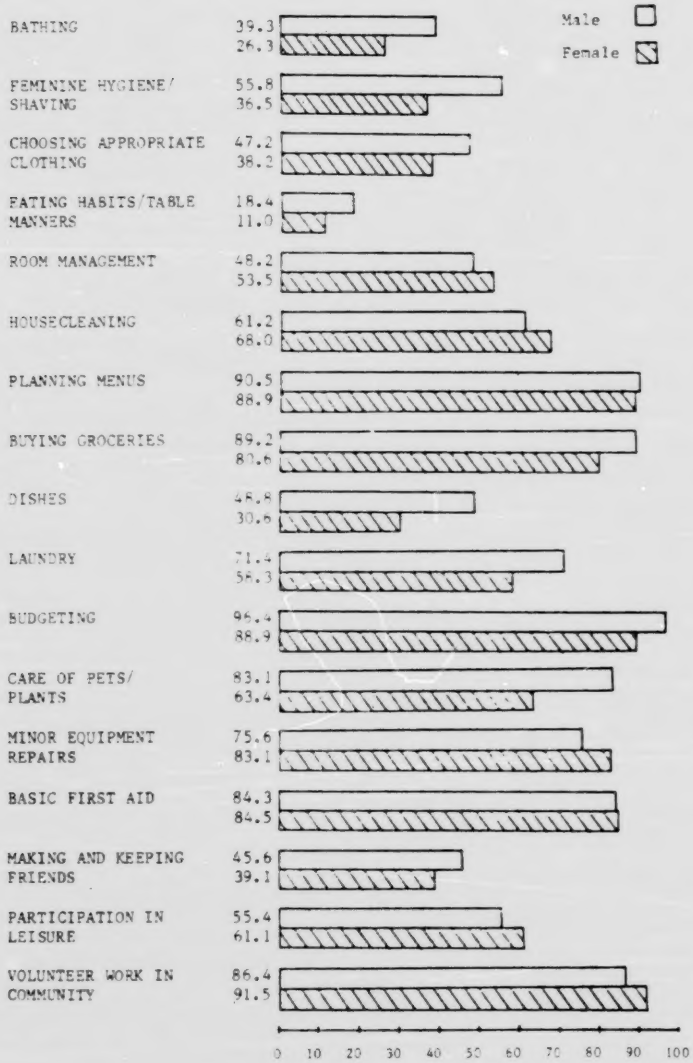
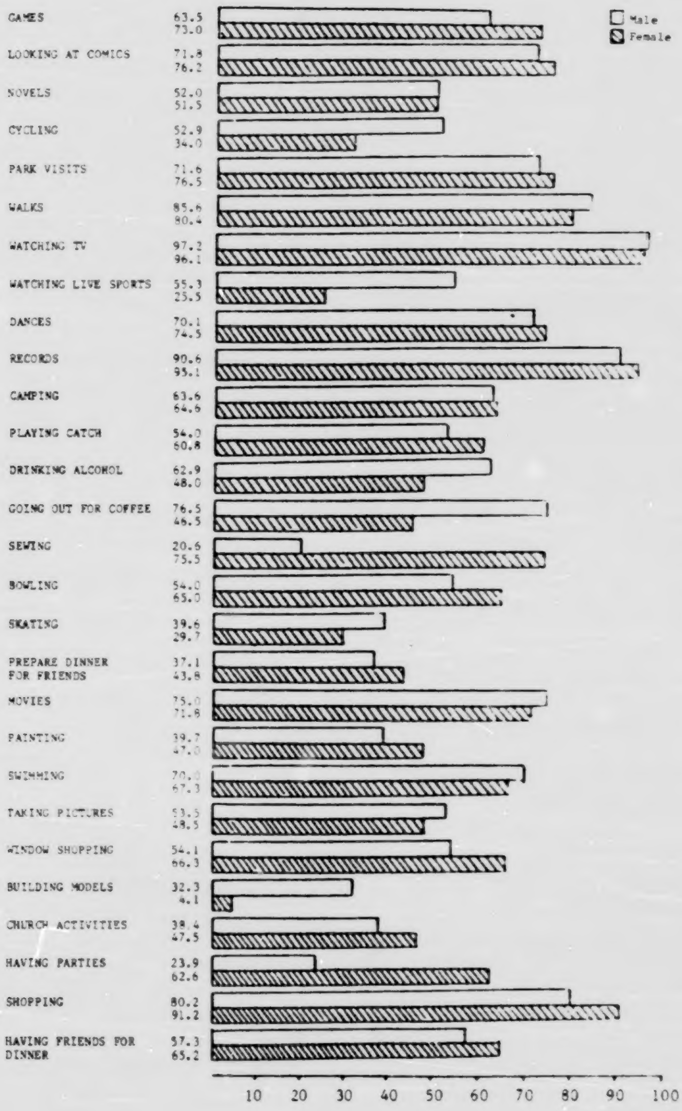


FIGURE 2

Leisure Activities Sometimes Participated in by Sex
Client Questionnaire -- Year 1



attained, which represents an extremely low level of movement from the agencies as a whole. It should be remembered that this was the first year of the Study and that the sample included a number of new admissions. Therefore it might be anticipated that this would be the lowest placement record during the lifecycle of the Study. However, because many people had been with the agency a considerable amount of time, it is of some concern that the figures for placement should be so low. Indeed this is more alarming when one considers that of the total number of individuals only 1.1 percent represented people monthly placements in paid employment, and almost one-third of the placements involved under this category were represented in part-time employment. During the first year of the Study four individuals (female) left their agencies for employment. Three of these persons found full-time employment and one part-time. In Year 2 of the Study, thirteen individuals (six males, seven females) obtained employment after leaving their agencies. Eight individuals (3 males, 5 females) were placed into full-time employment, while five (3 males, 2 females) obtained part-time employment.

The second year period is now under analysis. During year 2 of the Study, the people monthly placement rate increased to eight percent. People monthly placements in paid employment rose to 2.5 percent, but the one-third ratio of part-time employment to full-time employment was still maintained. Furthermore, a number of individuals were involved in full-time volunteer work and an increasing number had moved to alternate placements. These alternate placements included community college courses and recreation programmes.

Returns from supervisor questionnaires suggest group and individual training occupied on the average between 30 and 40 percent of the work time of frontline staff.

Rehabilitation Programme Costs

Programme costs, both direct and indirect, were obtained from agency accounting records and financial statements. The direct operating costs for each programme are the expenditures for staff salaries and benefits, supplies and services, and any wages paid to clients in vocational training units. The indirect programme costs are all other expenditures made by an agency in support of its rehabilitation programmes, but which cannot be directly attributed to a particular training or service unit. These costs are those for agency administration (administrative salaries, accounting services, printing, facilities maintenance).

TABLE 1

Total Type of Day Placement For Year 1 and Year 2*

TYPE OF DAY PLACEMENT	TOTAL YEAR 1	TOTAL YEAR 2
Vocational Training Host Agency	2,798	2,594
Vocational Training Alternate Programme	0	53
Sheltered Industry	2	27
Part-Time Employment	10	28
Full-Time Employment	20	45
Part-Time Volunteer	18	9
Full-Time Volunteer	0	12
Part-Time Alternate Programme**	5	55
No Day Programme	14	101

		Year 1	Year 2
PEOPLE MONTHLY PLACEMENTS =	$\frac{\text{Sum of people in a placement each month for every month}}{\text{Sum of total number of people in the study each month for every month}}$ =	2.0%	8.0%
PEOPLE MONTHLY PLACEMENTS IN EMPLOYMENT =	$\frac{\text{Sum of people placed in employment situations each month for every month}}{\text{Sum of total number of people in the study each month for every month}}$ =	1.1%	2.5%
PEOPLE MONTHLY PLACEMENTS IN VOLUNTEER SITUATIONS =	$\frac{\text{Sum of people placed in volunteer situation each month for every month}}{\text{Sum of total number of people in the study each month for every month}}$ =	.6%	.7%

* Cumulative totals

** Alternate day programmes include: Community college courses, recreation programmes.

Daily attendance data for all agency clients participating in each of the various training and service programmes were obtained from records kept by each unit, from which the daily attendance data for the Study clients were extracted. The percent of client attendance days to total attendance days for each cost centre provided the proportion of total costs attributed to Study clients. The average programme cost per client-day was then calculated for each cost centre by dividing total costs for Study clients by the client attendance days.

Details of programme costs for fiscal year 1983/84 are summarized by agency in Table 2. Those agencies which provide a range of services and those in large urban settings tend to have higher costs than the agency which is located in a small city (see Table 2). There is also much variability in programme costs and client performance measures among the agencies, but some correlations are apparent (Table 3). In the agency which has the lowest average client-day programme costs, staff spend the least amount of time on client training, the clients score highest (i.e., greatest handicap) on the Socialization/Communication and Developmental Skills Handicap Grid (Marlett, 1975), and score lowest (i.e., poorest) on the Social Educational and Vocational scales of the Adaptive Functioning Index (A.F.I.) (Marlett, 1971). In the agency which has the highest average client-day programme costs, staff spend the second highest amount of time on client training and the clients score second highest on the Social Educational A.F.I. scale. There appears to be a strong correlation between the amount of time staff spend on client training activities and client functioning ability. One would also expect programme costs to correlate positively with staff time spent on client training activities. However, there are anomalies for two agencies, whose average programme costs are low, and whose staff spend above average time on client training. The agency with the highest client-staff ratio has lower than average programme costs.

Discussion

The results underline a number of key characteristics which we believe have some support from other areas in the field of programmes for mentally and developmentally handicapped persons. Despite the early work carried out by Gunzburg (1968), and more recent work by Whelan and Speake (1981), Brown and Hughson (1980), and Parmenter (1976) which all refer to the importance of

TABLE 2

Summary of Programme Costs by Agency For Fiscal Year 1983-84

Agency	Number of Cost Centres	Number of RPS Clients	Average Client-Day Costs Per Cost Centre	Average Client-Day Costs Per Agency[a]	Average Annual Costs Per Client[b]
1	16	100	$44.31	$708.96	$20,830
2	8	93	31.41	251.28	9,029
3	2	12	45.55	91.10	9,785
4	1	16	33.95	33.95	6,536
5	1	19	15.34	15.34	2,625

[a] Average client-day costs per cost centre times number of cost centres.

[b] Total annual costs attributed to Study clients divided by number of Study clients.

TABLE 3

Programme Costs, Training Ratios and Client Handicap and Adaptive Functioning Index Scores (Year 1)

	Agency				
	1	2	3	4	5
Average Client-Day Programme Costs Per Cost Centre ($)	44.31	31.41	45.55	33.95	15.34
Ratio of Agency Clients to Total Agency Staff	2.7	3.2	4.3	8.8	5.7
Staff Time Spent on Client Training (%)[a]	41.0	41.6	45.0	47.8	27.5
Mean Socialization Communication Handicap Score[b]	1.70	1.66	1.67	1.53	2.74
Mean Developmental Skills Handicap Score[b]	1.56	1.51	1.67	1.53	2.10
Mean Score on Social Educational A.F.I.[c]	81.4	68.7	100.1	119.4	48.7
(n)	(103)	(95)	(15)	(15)	(19)
Mean Score on Vocational A.F.I.[c]	83.8	83.4	86.0	N.A.	69.8
(n)	(108)	(74)	(16)		(19)

[a] Table 2
[b] Marlett, 1975
[c] Marlett, 1971

integrated programming, it is apparent that in the five agencies selected in this Study it was in the social spheres of competence and in leisure time and home-living areas that individuals required the most help, for here the majority performed poorly. These concerns were noted by parents and sponsors and also by the clients.

The fact that many agencies still concentrate on vocational rehabilitation and that the placement rates into the community are poor, raises a major question. The number of long-term stay handicapped people in these agencies is gradually building to an institutionalized population which is not that different from the situation found in the traditional subnormality hospitals. Thus it would appear that although Canada purports to support normalization and integration this is not happening for many people in the Study. Indeed no one in our Study who had attended the programme for 144 months or more experienced any community placement. The cost data suggest that the poorest client progress is associated with less training and lower cost. These are anomalies which imply that the answer is not simply more funding but different use of present funding.

It is suggested that the current direction of vocational rehabilitation should be examined very carefully. It is questioned whether the accent in rehabilitation agencies should be on vocational training. Rather an integrated programme involving social home-living and allied skills training seems necessary. Frequently the parental home could provide training or opportunities in these areas, although we suggest that many parents may not wish to carry out these particular duties. This also suggests the need for programme reorganization and the training of rehabilitation personnel. Without skills in these particular areas, it seems highly unlikely that individuals will be placed successfully, and certainly under better economic conditions, where individuals who are handicapped have been placed in employment, problems have frequently arisen in social competency areas (Brown & Hughson, 1980).

It is suggested that there is a need to evaluate the training of staff, including their daily activities. The data from the Study suggest that only about one-third of the time are front line staff engaged in individual or group training. Further this activity is almost universally carried out within the rehabilitation agency when evidence suggests that training and support are required in the local community and the home environment.

It is important to ensure that those working in the field realize the long-term nature of rehabilitation. Over a two-year period the clients in the Study changed very little. In order to develop programmes a much higher level of professional expertise must be developed along with an opportunity to provide new types of programming. The development of programme packages, for example the curriculum developed by Hughson, Berrien and Brown in 1978 or the work of Whelan and Speake (1979) along with some of the behavioural techniques suggested by Martin and his colleagues in Manitoba need to be recognized within the Canadian rehabilitation field (Martin & Pear, 1983).

The data on leisure time suggest that most clients have not developed self-actualizing skills (e.g. organizing social leisure events) and in many cases have little interest in social or physical leisure-recreation skills. Our concern is that these skills provide opportunities for the development of physical stamina, motivation, attention and socialization. Without some positive experience in these areas the individual may fail in other areas such as employment for these are necessary attributes for performance in this area.

Generalization of the Results

It may be questioned to what extent these results apply across the country. We have no reason to think from our range of consulting and practice in various areas of Canada that these results are other than typical. Furthermore, we suggest that the principles that underline rehabilitation in this area also are relevant to work in other fields of rehabilitation (see Brown, 1984). The behavioural issues of handicap are essentially those which affect assertiveness, motivation, leisure time and social competence in home-living and allied areas. These represent and are affected by very practical skills which are needed on a day to day basis. Although many questions remain to be answered it is suggested that some of these issues need to be examined much more carefully in relation to research and development and then applied in a professional, and consistent, basis within the rehabilitation community.

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ADAPTATION OF THE MICRO-TOWER FOR USE WITH CANADIAN PSYCHIATRIC CLIENTS[1]

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ABSTRACT

When the Micro-TOWER vocational evaluation system was adopted by the Rehabilitation Services department of the Clarke Institute of Psychiatry it was decided that the U.S.A. norms may not be appropriate for use with the CIP population. Therefore the CIP analyzed the data from the first 150 respondents and compared these with the norms available from the International Center for the Disabled in New York.

While many of the results were similar to those of the published norms, it was found that CIP respondents tended to score higher than the psychiatric population upon which the ICD norms were established. There were virtually no differences between male and female testees. A factor analysis found three factors compared with the five identified by ICD, giving a clearer breakdown of the work areas assessed by the instrument.

ADAPTATION OF THE MICRO-TOWER FOR USE WITH CANADIAN PSYCHIATRIC CLIENTS[1]

The design of vocational rehabilitation services for hospitalized patients and community-based clients is predicated on the existence of appropriate instruments to assess functional state and make predictions on the level of future functioning of the patients/clients. In the literature one repeatedly finds emphasis on functional evaluation as the primary predictor of successful vocational outcome (Crewe & Turner, 1984). This is especially true with "emotionally fragile" clients as elaborated in a recent paper by Anthony and Jensen (1984).

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[1] Thanks are due to the staff of the Rehabilitation Services Department of CIP for their cooperation in collecting the data.

This paper reports on the work done at the Clarke Institute of Psychiatry (CIP) in Toronto with the Micro-TOWER, a work-sampling instrument, in creating norms for use with psychiatric clients in Metro Toronto. While the International Center for the Disabled (ICD), the developer and producer of Micro-TOWER has published a set of norms for agencies using this instrument, these norms are based on U.S.A. samples which may be quite different than Canadian samples. (See Bibliography for list of publications by ICD).

State of Knowledge

Diagnostic work evaluation has become one of the important activities in the vocational rehabilitation process (Dunn, 1971; Hoffman, 1973; Meister, 1976; Nadolski, 1972; Pruitt, 1977). It has served, not only to supplement psychological and vocational testing, but to some extent to replace paper and pencil measures (Anthony & Jensen, 1984). Neff (1970) stated that "Behavior can best be understood as a highly complex set of transactions between the individual and his surround" (p. 28). If we follow this statement, it is clear that the best way to assess the work potential of individuals is to place them in an actual work situation where their behaviour can be studied. For example, the practice of "job tryout" has now been adopted by a number of vocational rehabilitation organizations (including the CIP) in the form of "work stations" in which the patient is placed on an actual job and is assessed while under close supervision. But this system is expensive and time consuming and therefore can only be used with a small number of patients.

Thus a number of U.S. rehabilitation organizations have moved into the area of work screening or work assessment. Some of the impetus of this movement came from psychologists who began to test people for industrial jobs early in this century by putting them directly to work at simulated settings such as Hugo Munsterberg's "trolley car," an instrument used to select potential street-car conductors. But many psychologists tend to prefer paper and pencil tests and to deal with mental and personality characteristics rather than work performance.

The military also introduced work samples in their training, including simulation for aircraft pilots as part of their selection and training and in spy work training such as the OSS in the U.S.A. during WW II.

Probably the greatest contribution to the field of assessment of work potential in rehabilitation was by occupational therapy under the rubric of "pre-vocational testing" (Cromwell, 1960). The approach by OT generally focussed on testing physical capacity and work tolerance. Moreover, OT recognized the value of defining the task aspects rather than dealing with a complete job. Thus, work evaluation really shifted from job evaluation to task evaluation and work traits such as dexterity, finger and hand manipulation, eye and hand co-ordination, etc. were measured. This allowed the tester to generalize to many different jobs from specific work evaluation tests.

This approach was furthered when the U.S. government set up a project to break down job requirements into work skills and developed cut-off minimal criteria for referring to certain jobs. They recognized that digital dexterity was more important in watch repair than in gardening and charted all these in a Dictionary of Occupational Titles. This gave greater impetus to rehabilitation organizations to develop work sample instruments for assessment and screening.

At present 11 different American systems are available commercially. In deciding on the most appropriate one for use at the Clarke Institute of Psychiatry, the staff studied all the alternatives and read the available literature (e.g., Pruitt, 1977). The decision was to purchase the Micro-TOWER and adapt it for use with the Canadian psychiatric patients.

While the Micro-TOWER has been used for over eight years in the U.S.A., in at least 18 centres with thousands of trainees with all types of disabilities, two important facts should be noted. The first is that there are no norms for Canadian users regardless of the disability group. Second, there are no general population norms, even in the U.S.A., so that testees with disabilities cannot be compared with the industrial and clerical workers in competitive employment. Since the utility of an assessment tool is dependent on how it compares the behaviour of the users with those most similar to them adopting a work-assessment instrument must be accompanied by an attempt to develop two sets of norms; one of the population using the instrument, and one of the population to which the users will be directed for placement. The CIP has been unsuccessful in its attempts at procuring financial assistance to develop a set of norms for the Canadian population. But we are in the process of developing norms for the population of CIP patients that comes for vocational rehabilitation assessment and planning.

Method

A. Description of the Sample

The clients who are referred to the CIP for rehabilitation services can be described best as in Table 1.

TABLE 1

Description of Patients Serviced in the Rehabilitation Services and tested on Micro-TOWER

	Rehabilitation		Micro-TOWER	
Number	410		147	
Sex				
Males	265	(65%)	99	(67%)
Females	145	(35%)	48	(33%)
Age				
Mean (S.D.)	29.4	(9.0)	28.6	(7.0)
No. of hospitalizations				
Mean (S.D.)	2.25	(1.65)	2.50	(1.55)
Patient type				
Inpatients	94	(23%)	24	(16%)
Outpatients	316	(77%)	123	(84%)
Diagnosis				
Schizophrenia	175	(43%)	75	(51%)
Academic background				
Primary school only	58	(14%)	17	(12%)
Beyond primary school	336	(82%)	108	(73%)
Occupation				
Skilled	28	(7%)	14	(9%)
Semi-skilled	210	(51%)	88	(60%)
Clerical/sales	66	(16%)	22	(15%)
Never worked	25	(6%)	0	(0%)

However, not all of the clients are normally tested with the Micro-TOWER. Rather, the system is mainly used to test young male and female patients who have had vocational experience, or aspire to enter the labour market in semi-, or unskilled work or in clerical or sales occupations. The CIP sample, therefore, was a subset of the whole CIP population referred to the Rehabilitation Services, but not identical with it.

The Instrument

The Micro-TOWER is a system of vocational evaluation used with diverse groups of disabled, that allows the user to develop a vocational profile to help the patient formulate vocational plans. It measures five groups of general aptitudes (motor, spatial, clerical perception, verbal, numerical) commonly considered useful for semi-skilled and clerical occupations. It also has a section which identifies the type and extent of impairment of the user.

The system consists of the presentation of 13 work samples to groups of clients for learning practice periods, followed by an evaluation. In addition to the hands-on activities there are also group discussions and presentations of occupational information, as well as behavioural and attitudinal scales completed by both clients and evaluators. Evaluation of a group by clients up to 6 in size can normally take 5 days of testing.

As part of a standardization process, instructions for each of the 13 work samples are recorded on tape. Clients also may reduce the effect of past inexperience with the work sample activities by means of the practice, demonstrations by the evaluator and verbal explanation supplements. Written instructions and materials have been kept to a minimum to reduce reading skill differences. Finally, at the end of each day, group discussions are held and clients are encouraged to discuss their day's testing as well as occupational goals and problems relating to employment.

Results

A total of 147 persons were tested with the Micro-TOWER, but for some of the testees complete data were unavailable and analyses were done for as many as possible.

Table 2 compares the norms for the U.S.A. sample for psychiatric clients and the CIP sample. "t" tests were done for all the variables and because of the large number of tests being performed the alpha value was set at the .01 level. Nevertheless it is clear that in over half the activities measured, the CIP sample performed significantly better than the U.S.A. sample.

Table 3 compares the scores of males and females in the Micro-TOWER sample of CIP. In most of the subtests no significant differences were found and only in Lamp Assembly did the males perform better.

Table 4 shows interesting correlations. It appears that the degree of perceptual impairment is negatively correlated with most of the Micro-TOWER tasks (all except Payroll) and motor capacity impairment is similarly negatively correlated except with Payroll and Message taking. Memory and attentional impairments, on the other hand are negatively correlated with the clerical tasks. Motivational impairment is negatively correlated with half of the tasks.

Analyses were performed to see how highly correlated the various tasks are with each other and the results presented in Table 5 show that while the correlations are almost all significant, they are not very high.

A factor analysis identified three factors compared with the five identified in the U.S.A. sample. This analysis is presented in Table 6.

Looking at the data it appeared obvious that the main factor is a clerical skills factor, loading especially on verbal and numerical skills, the second factor a motor skills factor and the third, a perceptual skills factor. The U.S.A. sample had five unnamed factors. Perhaps the additional two factors in the U.S.A. sample are due to the fact that the data were collected from a group of respondents that included other than psychiatric subjects.

Discussion

While the manufacturer of an assessment instrument such as Micro-TOWER has the responsibility to validate its instrument, the ultimate responsibility lies with its users. Each user must invest the time and effort in test validation for the population with which the assessment instrument will be used. This requires the user to be cognizant of how the test was constructed, the type of population for which the test was intended, and any weaknesses or omissions in design and standardization. This holds true not only for psychological tests, but also for assessment instruments used in rehabilitation (see, Vocational Evaluation and Work Adjustment Association Code of Ethics, 1980). To this end the reported study was conducted.

TABLE 2

Comparison of Scores of the CIP Sample with the U.S.A. Psychiatric Sample

MICRO-TOWER	U.S.A.			CIP			
	N	M	SD	N	M	SD	t
Bottle Capping and Packing	505	32.16	6.03	130	34.42	5.46	+3.88*
Electronic Connector Assembly	515	98.74	20.30	130	106.18	16.89	+3.85*
Lamp Assembly	457	20.24	6.40	126	20.98	5.44	+1.19
Blueprint Reading	498	17.85	6.48	132	20.28	5.39	+3.96*
Graphics Illustration	511	22.27	8.86	130	21.52	8.41	0.87
Zip Coding	501	23.97	11.56	125	25.27	9.40	+1.59
Record checking	491	42.13	14.53	128	44.75	15.18	+1.80
Filing	505	10.30	3.85	130	11.61	2.29	+3.61*
Mail Sorting	509	34.88	11.78	129	34.27	9.79	0.54
Making Change	497	7.86	2.52	132	8.62	1.61	+3.29*
Payroll Computation	506	49.86	20.35	130	57.29	17.30	+3.82*
Want Ad Comprehension	533	25.73	5.04	129	26.60	3.82	+1.84
Message Taking	503	89.37	26.06	134	95.06	16.49	+2.68*
Age	560	30.20	?	147	28.57	6.95	

* $p < .01$

TABLE 3

Comparison of Scores by Sex of Testees

TEST	MALES			FEMALES			
	N	M	SD	N	M	SD	t
Bottle Capping and Packing	86	34.41	5.35	43	34.33	5.76	0.08
Electronic Connector Assembly	87	105.21	16.73	42	107.07	15.92	-0.60
Lamp Assembly	81	22.56	4.75	43	17.98	5.07	4.99*
Blueprint Reading	87	20.90	4.88	44	18.98	6.18	1.94
Graphics Illustration	87	22.35	7.92	42	19.60	9.16	1.75
Zip Coding	84	24.71	9.49	40	27.63	8.85	-1.64
Record checking	85	42.60	15.29	42	48.57	14.08	-2.12
Filing	86	11.54	3.22	43	11.79	2.52	-0.45
Mail Sorting	85	33.32	10.17	43	36.30	8.83	-1.63
Making Change	87	8.75	1.40	44	8.34	1.96	1.38
Payroll Computation	86	57.28	17.32	41	56.06	16.21	-0.24
Want Ad Comprehension	84	26.12	4.29	44	27.48	2.57	-1.93
Message Taking	90	93.13	18.22	43	98.93	11.54	-2.02
Age	98	28.35	7.07	48	29.04	6.81	-0.56

* $p < .01$

TABLE 4

Correlations of Severity of Impairments with Task Scores ($N < 100$)

Impairment	Elect. Com. Ass.	Lamp Ass.	Graphics	Zip Coding	Payroll	Message taking
Perception	-.315 (.000)*	-.230 (.007)	-.154 (.045)	-.164 (.039)	-.103 (.132)	-.161 (.037)
Motor Capacity	-.531 (.000)	-.505 (.000)	-.194 (.016)	-.172 (.033)	-.061 (.254)	-.146 (0.53)
English	.031 (.366)	.058 (.267)	-.093 (.153)	-.327 (.000)	-.277 (.001)	-.575 (.000)
Memory	-.141 (.061)	.005 (.477)	-.289 (.001)	-.454 (.000)	-.284 (.001)	-.470 (.000)
Attention	-.136 (.068)	.013 (.443)	-.176 (.026)	-.302 (.000)	-.220 (.008)	-.166 (.032)
Motivation	-.093 (.154)	-.075 (.212)	-.217 (.008)	-.146 (.059)	-.334 (.000)	-.213 (.009)

* Level of significance in parentheses

TABLE 5

Correlations of Task Scores (N < 100)

	Elect. Com. Ass.	Lamp Ass.	Graphics	Zip Coding	Payroll
Electric Connection Assembly					
Lamp Assembly	.499 (.000)*				
Graphic Illustration	.423 (.000)	.265 (.002)			
Zip Coding	.291 (.001)	.170 (.040)	.300 (.001)		
Payroll Computation	.193 (.020)	.130 (.089)	.338 (.000)	.682 (.000)	
Message Taking	.257 (.003)	.149 (.060)	.418 (.000)	.695 (.000)	.541 (.000)

* Level of significance in parentheses

TABLE 6

Micro-TOWER Factor Loadings

Factors	I		II		III		IV	V
	U.S.A.	CIP	U.S.A.	CIP	U.S.A.	CIP	U.S.A.	U.S.A.
Bottle Capping & Packing			.86	.87	.33			
Electronic Connector Assembly			.80	.81				
Lamp Assembly			.70	.57			.31	
Zip Coding	.59	.54			.62	.63		
Record Checking	.31		.45	.37	.59	.74		
Blueprint Reading	.50	.74	.33				.57	
Graphics Illustration	.37	.34	.39	.51			.65	
Filing	.67	.61			.37			
Mail Sorting	.67	.47	.35		.46	.56		
Making Change	.74	.41						.33
Payroll Computation	.62	.49			.48	.59		.31
Want Ad Comprehension	.83	.73						
Message Taking	.80	.81			.33			
Variance accounted for	79%	69%	12%	22%	10%			

Note. Values less than .30 have been omitted. The U.S.A. sample consists of 1100 clients tested in 18 agencies during national field training and the CIP sample = 138.

The main findings appear to be that the CIP clients perform much better on the Micro-TOWER tasks than does the U.S.A. sample represented in the American norms. We need to be wary in using American norms in all our evaluation procedures and especially those in which important appropriate will be made.

It may be that the CIP population is not representative of psychiatric populations across Canada or even throughout Metro Toronto and here again the caveat must be reasserted. Whenever an organization or institution introduces a new assessment test or device local norms should be established so that each testee is compared with the most appropriate group.

In fact, at the CIP we have been moving towards establishing norms for Sex x Disability because analyses of variance have shown differences among these groups. It may, however, be some time before there are enough data for the various groups and meanwhile only a combined norm is presently in use.

At present the staff is gathering data on both the Micro-TOWER and GATB tests so that validity can be examined. There is some information in mimeographed form from the International Center for the Disabled but we are working to revalidate it with a local population looking at the information in relation to successful outcome of vocational planning.

Any organization considering the adoption of a work samples assessment instrument should consider the Micro-TOWER. It has a number of positive features, not the least of which is its structured format which lends itself to the development of norms for the population it is serving. But this strength is also its weakness, for the structured delivery of instructions via audio-tapes tends to introduce a rigidity that may turn off individuals who either catch on to the instructions rapidly and are held back from starting the actual activity, or who require special consideration to help them concentrate on and comprehend the tapes.

This conflict in the need to be flexible in order to serve clients of disparate abilities and the need to follow standard procedures so that a client may be compared with a peer group is one that is faced by every user of a standardized instrument. It seems to us that flexibility can and should be followed but not at the expense of an early examination of the reliability and validity of the instrument locally and the establishment of local norms.

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FACILITATION OF TEACHING AND LEARNING: WHAT PROFESSORS, STUDENTS WITH A PHYSICAL DISABILITY AND INSTITUTIONS OF HIGHER EDUCATION CAN DO

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ABSTRACT

This report summarizes recommendations made by students with a physical disability and by professors who have taught them about what people and institutions can do to facilitate teaching and learning in institutions of higher education. Thirty-seven college and university students with various physical disabilities, 74 professors who have taught disabled students and 17 professors who have not done so answered 5 open-ended questions concerning what professors, disabled students, and institutions could do to make teaching and learning easier and more effective. The 1056 recommendations were grouped, categorized and ranked in order of frequency. Recommendations are presented in tabular form under the following headings: facilitative actions by professors, facilitative actions by students with a disability, needed services, facilities, and equipment and other recommendations. Consistencies as well as discrepancies among recommendations by the three groups are noted and the implications of the findings for teaching, learning and institutional practices are discussed.

FACILITATION OF TEACHING AND LEARNING: WHAT PROFESSORS, STUDENTS WITH A PHYSICAL DISABILITY AND INSTITUTIONS OF HIGHER EDUCATION CAN DO

Higher education for people with a physical disability is viewed by many as the key to maximizing their potential, to leading a more fulfilling life and becoming self-sufficient in a world that behaves harshly toward those who are "different" (McLoughlin, 1982; Penn & Dudley, 1980). current government policies reflect the need to provide higher education to people with physical disabilities and emphasize that this is a priority issue (Office des Personnes Handicapées du Québec, 1984; Special Committee on the Disabled and the Handicapped, 1981). To assure quality higher education to people with disabilities a variety of concerns must be addressed. While there are other influential factors (cf. Fichten, 1985; Fichten & Bourdon, 1984; Fichten & Amsel, in press; Fichten, Compton & Amsel, in press; Fichten, Hines & Amsel, in press; Robillard & fichten, 1985), knowing what professors, students with a disability and institutions of higher education can do to make teaching and learning easier and more effective is particularly important.

The Canadian Organizing Committee for the International Year of Disabled Persons recommended "That teachers in Canada facilitate access for disabled students to the public educational system..." (COC, 1981, Recommendation No. 20). But how is this to be done? As recently as 1980, Beatrice Wright, one of the best known researchers in the field of physical disabilities, in her review of the literature concluded that "regrettably, many change (mainstreaming) programs are ineffective and may even contribute to disabling myths about disability" (p. 274). Clearly, mainstreaming is both a costly and difficult process (Alexander, 1979).

Reasons for the ambivalent results of mainstreaming programs include not only lack of needed services, equipment and architectural modifications but also inadequate teacher (Hirshoren & Burton, 1979; Rauth, 1980; Reynolds, 1980) and disabled and able-bodied student preparation for integration (Delli Colli & MacDougall, 1983; English, 1971; Gresham, 1982; MacDougall, Munhall & Destounis, 1981). Although a variety of teacher preparation programs have been evolved, little empirical evidence of their effectiveness exists (cf. Bayne & Caton, 1979). Not only are these programs possibly ineffective, and perhaps even deleterious, but most were designed for teachers in the primary and secondary school system and are, therefore, inappropriate for college and university professors.

During recent years a number of architectural barriers to wheelchair users have been eliminated in colleges and universities. While this is a very important change, there are many other considerations which must be taken into account in order to make higher education truly accessible to people with physical disabilities (McLoughlin, 1982). These include the availability of facilities, equipment and services as well as behavioural adaptations both by the disabled students and by the professors who teach them.

In the realm of higher education a number of compilations of suggestions for effective teaching and learning and needed services, equipment and architectural modifications exist (e.g., Alexander, 1979; Evans, Bissonnette, Tesler & Dorfman, undated; Kunc, 1981; Marion & Iovacchini, 1983; Smith, 1982; Stilwell & Schulker, 1973; Stilwell, Stilwell & Perrit, 1983). While a number of these documents also provide teaching and learning "tips" for college students who have a disability as well as for their professors, the recommendations, although informed and well meaning, are dramatically different from each other and often contradictory. Since experts, be they professionals or disabled students, do not always agree on what are and what are not effective student or professor behaviours, the determination of appropriate interpersonal behaviours between these two group must be effected empirically. The present investigation addresses this issue.

Method

Subjects

Thirty-seven college and university students with various physical disabilities, 74 college and university professors who have taught disabled students and 17 professors who have not done so served as subjects.

Subjects were selected in the following way. The first step was to contact as many college and university students with a physical disability as possible; this was done through personal contacts, coordinators of services for disabled students and associations for people with physical disabilities. Most of the students contacted agreed to participate and many provided us with the names of professors who have taught them. professors on these lists were contacted and again most agreed to participate. An attempt was made to obtain a "matched" group of professors who had no experience teaching disabled students for comparison purposes. This was done by contacting, on a random basis, professors of the same gender from the same institutions and departments as the professors on the disabled students' lists.

When the "matched" professors were contacted an interesting difficulty arose; 62% of these professors had taught a student with a physical disability. These professors were reclassified and were asked to complete the questionnaire. While this upset the systematic sampling procedure, a larger more diverse sample of professors who have taught students with disabilities appeared to warrant this decision. The composition of the final sample is as follows:

Students. The average age of the 37 students who participated was 26 years (range = 19-37). Twenty-four percent of the students were wheelchair users, 24% had a hearing impairment, 18% had a visual impairment, 18% had cerebral palsy, and 16% had other physical disabilities (mainly neuromuscular). Thirty-two percent of the students attended community college (CEGEP) and 68% attended university: 31% indicated that they were enrolled in Arts, 20% in Arts and Science, 11% in a Vocational Diploma Program, 9% in Science and 29% in other programs (e.g., Engineering, Social Work).

Professors Who Have Taught Disabled Students. Most of the 74 professors in this group have taught several students with physical disabilities; the average number of disabled students taught was 3 (range = 1-15). Fifty-seven percent of professors had taught at least one visually impaired student, 32% a hearing impaired student, 30% a wheelchair user, 11% a student who had epilepsy, 12% a student with cerebral palsy, 12% a student with a speech impairment (some of these students may also have had cerebral palsy or a hearing impairment), and 36% of professors had taught students with other disabilities (mainly neuromuscular). Sixty-one percent of the professors taught primarily at a community college and 39% at a university: 61% indicated that they taught in an Arts program, 15% in a Vocational Diploma Program, 9% in Arts and Science, 4% in Science and 11% in other programs.

Professors Who Have Not Taught Disabled Students. The 17 professors who have not taught disabled students were somewhat younger than those who had done so. Forty-seven percent of professors in this group taught at a community college and 53% at a university; 63% taught in an Arts program, 13% in Arts and Science, 13% in Science, 6% in a Vocational Diploma Program and 5% in other programs.

Procedure

All participants were mailed the same questionnaire; it consisted of three separate sections. The section relevant to this report consisted of five open-ended questions; question 1 asked participants what professors can do to make their courses more manageable for physically disabled students, question 2 asked what a disabled student could do to help the professor teach disabled students more effectively, question 3 asked what a disabled student could do to make a course manageable for himself/herself, question 4 asked what equipment and/or resources are needed by disabled students and their professors and question 5 asked what institutions could do to make academic life more manageable for physically disabled students and their professors. Participants were asked to list, for each question, up to five suggestions, basing their responses on their own experiences whenever possible.

Results

The sample of participants, while by no means randomly selected, is reasonably large and diverse. The group of professors who have not taught disabled students, however, is quite small. The results should be interpreted cautiously given these limitations.

A total of 1056 suggestions were made by the participants. The 283 suggestions made in response to question 1 (what professors can do) were considered separately; these were grouped by members of the research team into 22 categories. Each suggestion mentioned by at least two participants formed a category. Categories were arranged in rank order of frequency; these are presented in Table 1. The ranks in Table 1 are based on the total number of responses made by students with a physical disability and by professors who have taught them (scores of professors who have not taught disabled students were not included in these ranks since their responses often differed considerably from those of the other two groups of participants). Figure 1 shows the proportion of responses made by each of the three groups in each category. Scores of the three groups of participants were prorated to compensate for unequal sample sizes. The most frequent recommendation made by students with a physical disability plus by professors who have taught them was made equal to 100. All other scores were adjusted appropriately.

There was considerable overlap in suggestions made by participants in response to questions 2 and 3 (what students can do). Therefore, responses to these two questions were combined; this resulted in 27 categories based on 367 responses. Table 2 and Figure 2 present information on suggestions made concerning what students can do.

TABLE 1

What Professors Can Do

In your opinion, what can a professor do to make his/her courses more manageable for physically disabled students?

Rank[1]	Recommendations
1.	Be flexible with content and format of assignments and exams (e.g., oral, braille, audiotaped, written) and give extra time if needed.
2.	For students with a hearing impairment give lectures slowly, loudly, with open mouth not covered by hand or book and repeat if necessary. Face class and not the blackboard, avoid standing behind student and walking back and forth in front of class. Write all important material on the blackboard or overhead and be sure that material is written clearly and is well organized.
3.	Be a good teacher in general (e.g., make lectures and notes easy to understand, be open minded when dealing with student, understand and adapt to the needs of individual students).
4.	For students with mobility impairments ensure that class, lab, building, field trip, etc. is in an accessible location.
5.	Hand out typed or printed notes.
6.	Be supportive but do not be overly solicitous; treat the student as any other student whenever possible.

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[1] Items are arranged in rank order from most to least frequent recommendation. Ranks are based on the responses of disabled students and of professors who have taught disabled students (scores of professors who have not taught disabled students were not included in these ranks since their responses often differed considerably from those of the other two groups of participants).

7. Meet with student regularly and give extra time outside class.

8. Find out how the student's disability can affect learning in your course from: colleagues with experience, students, organizations, and the literature.

9. Allow taping of lectures.

10. Discuss teaching and learning alternatives with students, take strengths and weaknesses into account and make adjustments if these are needed.

11. For visually impaired students, make sure required materials (e.g., assignments, handouts) are available on tape or in braille.

12. Approach the student to ask if adjustments are necessary and to indicate that you are available to help.

13. Arrange for other students to help (e.g., mobility, tutoring, study, readers, notes, etc.).

14. Encourage other students to interact with disabled student (e.g., by assigning students to work in pairs, having students work in small groups).

15. Give an outline of the course, explain course content and requirements clearly, be exact about necessary reading material and provide this information early in the term to allow for advance planning by the student.

16. Make sure that classroom/lap furniture is appropriate for wheelchair users.

17. Allow choice seating for disabled student.

18. Individualize the course for the disabled student (e.g., offer a reading course or an individualized program, arrange special viewings of audio-visual materials for student.

19. Know about services available for disabled students and tell them about these.

20. Lobby colleagues and administrators for equipment and tell students to demand equipment.

21. For students with a visual impairment, use models, visual relief maps, replicas, etc. to convey ideas.

22. Use an amplification system with hearing impaired students.

FIGURE 1

WHAT PROFESSORS CAN DO

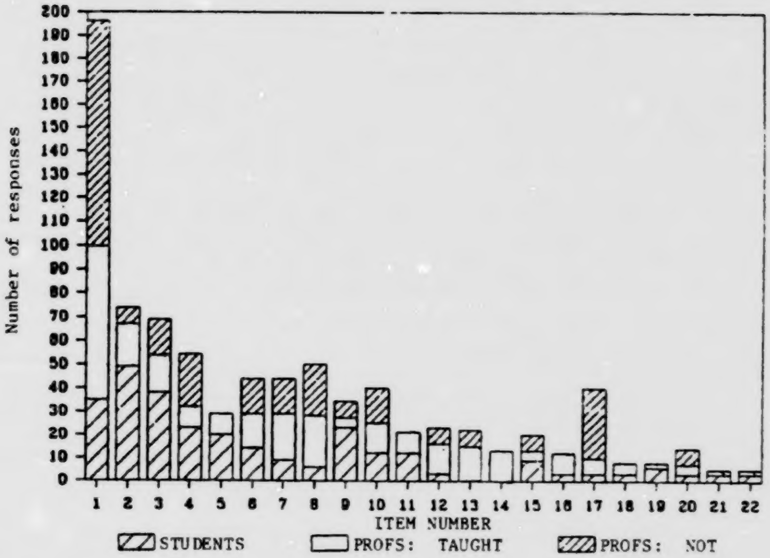

TABLE 2

What Students Can Do

In your opinion, what can a physically disabled student do to help the professor teach disabled students more effectively and to make a course more manageable for him/herself?

Rank[1]	Recommendations
1.	Educate professor about the needs of disabled students so that needed course adjustments could be made (e.g., talk to the professor about the disability, equipment used, limitations, problems, help needed, potential medical problems, etc.).
2.	Befriend other students in the class, work with them and ask for their help (i.e., set up a support system).
3.	Give professor suggestions concerning what he/she could do to make the course more manageable for you (i.e., give feedback on test design, grading and evaluation, state your opinions, keep in regular contact and talk to professor concerning previous teaching methods, problems and solutions).
4.	See the professor before the term starts to make special arrangements and to find out about course requirements and evaluation methods.
5.	Accept and know your limits when they are there (e.g., take a lighter workload if necessary).
6.	Work harder and take a keen interest in the course.

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[1] Items are arranged in rank order from most to least frequent recommendation. Ranks are based on the responses of disabled students and of professors who have taught disabled students (scores of professors who have not taught disabled students were not included in these ranks since their responses often differed considerably from those of the other two groups of participants).

7. Don't ask for special treatment unless it is necessary.

8. Plan ahead and be organized; start studying and preparing assignments early.

9. Be sure that you have adequate lecture notes (e.g., tape lectures, ask other students to take notes in class for you, borrow good notes, check your notes with others).

10. Be aware of technology that supports learning and use it both in and out of class.

11. Be insistent and don't be shy; make the professor listen to your view of what can and what can't help.

12. Consult periodically with professor in his/her office.

13. Ask questions during or after class.

14. Be a good student (i.e., be attentive in class, attend class regularly, do your reading assignments, etc.).

15. Get volunteer help or a study-buddy.

16. The student should help the professor to feel comfortable with him/her (e.g., tell professor that it's ok to use words such as as "disabled", "see you", "do you see my point", "let's go for a walk", etc.).

17. Give the professor feedback (i.e., let the professor know if your needs are not being met and remind the professor to make adjustments when he/she forgets).

18. Sit in the best physical location (e.g., in front of teacher).

19. Ask professor to outline what will be covered in each lecture and to give lectures slowly and clearly and to point out what is important.

20. Use the learning centers or get a tutor if necessary.

21. Point out problems before they arise or whenever you anticipate one and not when it's too late.

22. Be patient and keep your cool.

23. Understand the needs of other students in your class (i.e., think of others' needs too).

24. Demand equality if evidence of discrimination exists.

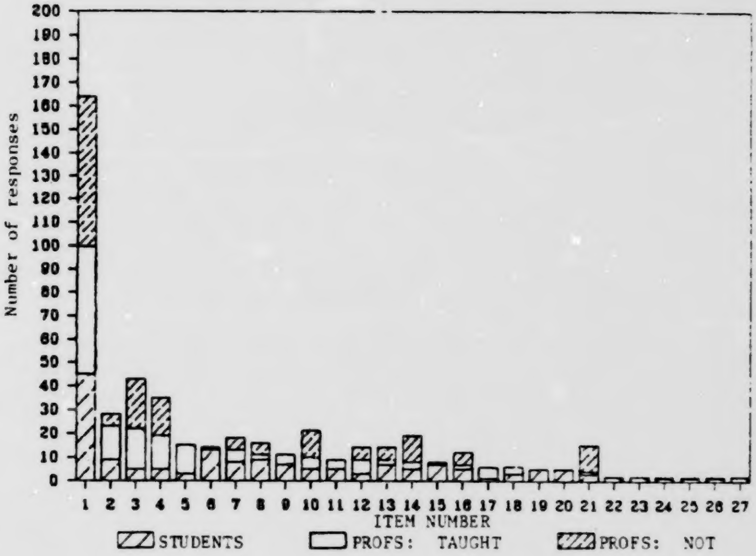
25. Inform the class about your disability.

26. Learn to type.

27. Inform the professor of your resources (e.g., braille materials) and of the services available to you.

FIGURE 2

WHAT DISABLED STUDENTS CAN DO



The 406 responses to questions 4 and 5 (what institutions can do) were also combined; these yielded 35 categories which were grouped as follows: services, facilities, equipment/resources, and other suggestions. Recommendations concerning what institutions can do are provided in Table 3 and in Figure 3.

TABLE 3

What Institutions Can Do

In your opinion, what equipment and/or resources are needed by physically disabled students and their professors and what can institutions (i.e. colleges, universities, organizations for disabled people) do to make academic life more manageable for physically disabled students and their professors?

Rank[1]	Recommendations
Services	
S1.	Establish and maintain a center for disabled students which 1) serves as a drop-in center for disabled students and their professors, 2) provides services (e.g., resources, counselling, resource people, specialized services, a liaison person for disabled students and their professors, contact with professionals familiar with various disabilities), 3) disseminates information (e.g., on various disabilities, on teaching methods) and 4) sponsors "awareness" and "sensitization" programs.
S2.	Ensure the availability of volunteers (or paid personnel) such as readers, note takers, helpers with library access, typists, Braille translators, aides for help with washrooms, lockers and mobility in general.

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[1] Items are arranged in rank order from most to least frequent recommendation. Ranks are based on the responses of disabled students and of professors who have taught disabled students (scores of professors who have not taught disabled students were not included in these ranks since their responses often differed considerably from those of the other two groups of participants).

S3. Give support to help establish and operate a viable disabled student group.

S4. Provide tutors.

S5. Provide help with transportation (e.g., inter-campus, from home to institution).

S6. Set up scholarships and help with bursaries.

S7. Make available a professional support system (e.g., audiologist, medical advisor, counsellor, academic advisor).

S8. Improve fire-safety procedures to take into account the presence of disabled students.

S9. Set up designated study areas with appropriate equipment in labs and in libraries (with easy access to frequently used resource materials and references).

Facilities

F1. Ensure wheelchair accessibility in libraries, classrooms, labs, buildings, etc. (i.e., ground floor rooms if possible, replace unnecessary impediments such as stairs with ramps, make accessible: doorways, telephones, door handles, toilets, fountains, food, light switches, pencil sharpeners, lockers, elevator buttons, etc.).

F2. Provide ramps appropriate for disabled students.

F3. Ensure that elevators and escalators are approachable by disabled students and that there is easy access to these (reserved if necessary).

F4. Provide desks, chairs, tables, easels, studio equipment and lab equipment etc. at proper levels to accommodate wheelchairs.

F5. Provide quiet, well lit rooms for study and exams, [i.e., carpeted (to deaden sound), no buzzing or flickering lights (needed by hearing and visually impaired students)].

F6. Provide flexible classroom seating arrangements.

llocate a room to secure wheelchairs for times when these are not in use.

F8. Make physical adjustments for visually impaired students (e.g., elevators with a floor sound indicator, Braille menus in cafeteria).

F9. Provide specially equipped meeting areas.

Equipment/Resources

E1. Tape recorders (regular, high volume, small, etc.)

E2. Miscellaneous specialized equipment [e.g., dictating machines, talking calculators, tailon slates, computers (with symbolic mathematics capability and/or voice synthesis), note taking paper, special telephones with amplifier].

E3. Audio-visual equipment for classrooms (e.g., microphones, FM system, sound amplication system, transmitters/receivers, good facilities for taping, opaque projectors, clear over-head transparencies, overhead projectors).

E4. Brialle books and audiotaped (talking) books.

E5. Typewriters.

E6. Braille writers.

E7. Equipment for emergencies and breakdowns (e.g., spare wheelchairs, crutches, canes, hearing aid batteries, wheelchair battery charger, audiotapes, etc.).

E8. Optacon (magnifying equipment).

E9. Audio-visual equipment (miscellaneous).

E10. Other resources: films or slides for deaf students (e.g., words on film), tactile models (biology, chemistry).

Other Recommendations

O1. Hold programs and seminars to sensitize the student population and others to the problems of disabled students.

02. Make some changes in admission and registration procedures (e.g., accept more disabled students, keep a record of disabled students, grant priority at registration, help to arrange manageable schedules, provide on site orientation, try to ensure courses on a single campus, inform professors ahead of time if student needs special help or facilities, set up meeting between professor and student to allow professor to tell the student in advance what books are required, allow the student to take a reduced load of courses without loss of full time status, facilitate the admission of disabled students into specific courses).

03. Try to provide a welcoming, open minded atmosphere and an administration which provides swift response to professors' and disabled students' needs.

04. Provide a forum for research and discussion (i.e., encourage professors and professionals to share experiences and solutions to problems encountered in teaching disabled students).

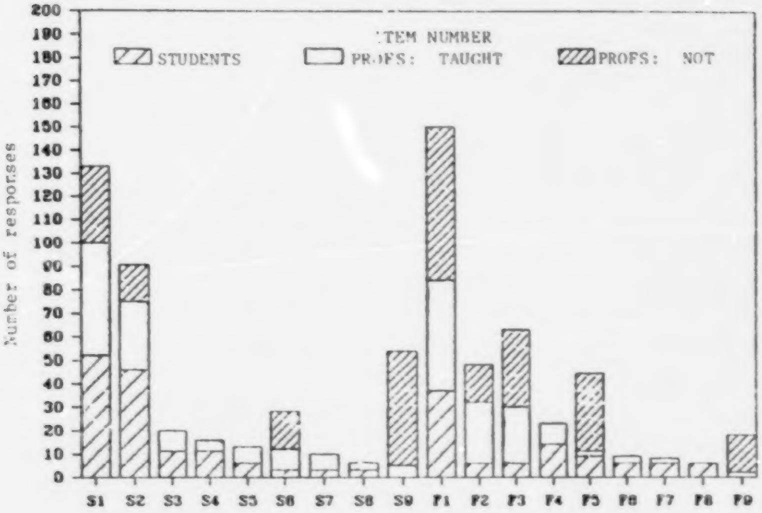
05. Suggest to teachers that they have an obligation to search for ways to help the physically disabled students who take their courses.

06. Advocate for improved resources and human rights at all levels.

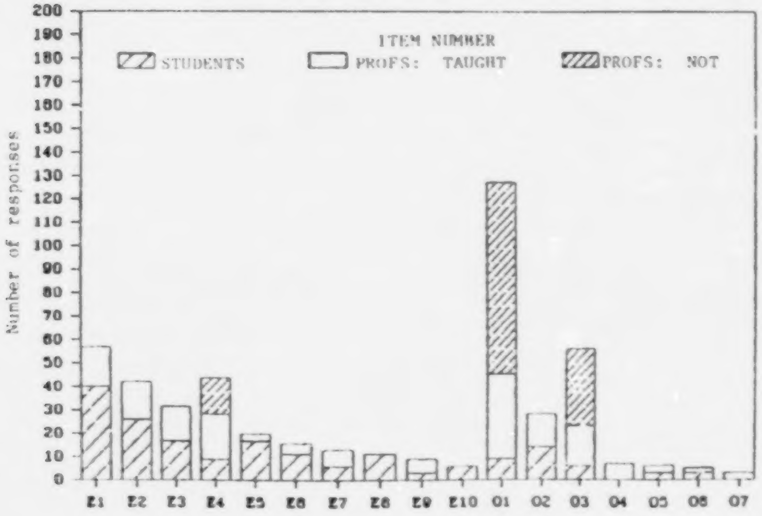
07. Offer complementary courses in sign language and braille for non-disabled students.

FIGURE 3

WHAT INSTITUTIONS CAN DO
SERVICES AND FACILITIES



WHAT INSTITUTIONS CAN DO
EQUIPMENT/RESOURCES AND OTHER



Discussion

We believe that the most valuable component of this report consists of the findings presented in Tables 1-3. It should be noted, however, that the ranks provided in the tables can serve only as a general indication of the importance of each recommendation. First of all, the sample was by no means random. Secondly, while the ranks are based on responses by students with a physical disability and by the professors who have taught them, it must be remembered that participants were asked to base their suggestions on their own experiences whenever possible. Thus, in the case of needs and concerns specific to a particular disability, the ranking of a recommendation may be low not only because few people believe that it is important but also because only a subset of the participants have had experience with the disability in question. However, since many of the recommendations are common to most disabilities this restriction does not pose a serious problem for the interpretation of the findings.

While there were many commonalities among the three groups of participants' views, there were also a number of interesting differences; both have implications for students and professors alike.

What Professors Can Do

The most remarkable aspect of the recommendations made concerning what professors could do to make teaching and learning easier and more effective for students with a physical disability is that most of these suggestions apply equally well to the teaching of non-disabled students. For example, the most frequently made recommendations in response to the question about what professors could do to facilitate learning were: flexibility with the content and format of assignments, delivering lectures clearly and making effective use of the blackboard or over-head projector. In addition to such recommendations, a variety of suggestions were also made concerning teaching students with specific disabilities.

While most recommendations listed in Table 1 appear to be "common sense" suggestions, discrepancies among the responses of the three groups of participants show that what is common sense to members of one group is not necessarily so for members of another group. For example, the most frequent responses of students concerned lecture style, written handouts, permission to audiotape lectures, and blackboard organization.

Professors, on the other hand, especially those who have had no experience teaching students with a disability, did not consider these to be key issues. While many professors in both groups recommended that teachers meet with their physically disabled students regularly outside class time and that they inform themselves about how the student's disability affects learning in their courses, few students felt that this was important. Similarly while the suggestion that professors should arrange for able-bodied classmates to help the physically disabled student ranks in the middle for professors who have taught students with a physical disability, not one of the disabled students made this recommendation. It appears, thus, that priority items for students with physical disabilities include suggestions which would benefit able-bodied students as well. Furthermore, their priority items do not require additional time or energy from the professor.

What Disabled Students Can Do

The most frequent recommendation of all three groups of respondents to the questions which dealt with what students could do to facilitate teaching and learning concerned educating the professor about the needs of students with a physical disability. However, in many of their recommendations concerning what students with disabilities could do to improve the process of education, students and professors differed substantially. For example, as Figure 2 shows, while the students recommended working harder, planning ahead and obtaining good lecture notes, few professors made these suggestions. Many professors but few students recommended that students give specific suggestions and feedback concerning their courses, that students meet with professors before the beginning of term and that they identify potential course problems before they arise. Here, it appears that students stressed what they could do for themselves while the professors focused more on what the student could do to help them to be better teachers. Students with disabilities may want to heed both types of suggestions.

What Institutions Can Do

In response to the questions concerning what institutions could do to facilitate teaching and learning the most frequent recommendation made by both the disabled students and by the professors who taught them was that the institution establish and maintain a center for disabled students which serves as a drop-in center, provides services, disseminates information and sponsors "awareness" and programs. Other frequently made recommendations concerned wheelchair accessibility, availability of volunteers (or paid personnel) as readers, note takers, etc., and availability of tape recorders for student use.

As Figure 3 shows, while there were some glaring discrepancies among the three groups, in many of the 35 categories there was reasonably good agreement between students with a disability and the professors who have had experience teaching them concerning what services, facilities, and equipment are needed. Suggestions made by professors who have not taught students with disabilities, however, were often unrelated to recommendations made by the other two groups. This was especially true in the areas of services and equipment.

As for needed facilities, while everyone agrees that campuses should be accessible to wheelchairs, it seems as though professors are more likely to focus on specific architectural modifications for wheelchair users while the students seem to be more concerned about adequate table heights, a place to locate wheelchairs when these are not in use and about physical changes to accommodate students with visual impairments. The differences highlight that professors generally think of wheelchair accessibility while the students are more concerned about the environment within the institution as well as about the facilities needs of students with disabilities other than those which require the use of a wheelchair. The students' recommendations should sensitize college and university communities to the reality that facilities for students with sensory impairments also should be given attention. These changes can usually be effected with minimal cost (cf. Evans, Bissonnette, Tesler & Dorfman, undated).

There is not very good agreement among the three groups in the "other recommendations" category. For example, many professors but few students feel that the institution should provide a "welcoming atmosphere" and that it should sponsor "awareness and sensitization" programs. Professors who have taught students with disabilities, but not those who have no experience with disabled students, also recommend that the institution provide a forum for research and discussion. Students, on the other hand, appear to be more concerned with changes in registration and admissions procedures. Not surprisingly, both students and faculty alike have proposed institutional changes which would make their own lives easier.

The discrepancies among the three groups underscore an axiom which many espouse but few follow. First of all, professors and students need to be informed about each other's concerns and needs. Because of their different vantagepoints, these do not always coincide. Secondly, professors who have not taught students with disabilities are often unaware of what is actually needed by disabled students and their professors. Third, students with different disabilities have differing needs and concerns.

Since professors, able-bodied students and students with a physical disability often have different views and priorities (cf. Barile, 1985), institutions planning changes to better accommodate and educate students with disabilities should involve and listen both to students with various disabilities as well as to the professors who have taught them. Only in this way will well-meaning institutions effect needed modifications and changes.

Other Findings

An interesting although unexpected finding of the study is that most experienced college and university professors have taught at least one disabled student. While this phenomenon accounts for one of the most troublesome deficiencies of this study, since it upset the systematic sampling and also resulted in a small comparison group of professors who have not taught disabled students, nevertheless, we feel that it is an important finding. While many institutions recognize the need to provide adequate services, equipment, resources and facilities for students with physical disabilities, the argument is frequently made that the cost of meeting these needs is not warranted by the number of disabled students on campus. Humanitarian considerations aside, knowing that more than half of the faculty are also affected by lacunae in these areas may encourage educational institutions to reexamine their funding priorities.

Conclusions

While the methodology of this investigation has a number of limitations, many of the recommendations listed were of considerable priority to all groups of participants. Since it is important to provide higher education to people with physical disabilities and since, as the Office des Personnes Handicapées du Québec noted, it is an unsupportive environment which makes a person with a physical disability handicapped (OPHQ, 1984), the suggestions made by those most intimately involved with the education of disabled students deserve careful and detailed examination by professors, students with a disability, and college and university professionals and administrators.

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AUTHOR NOTES

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Completion of this study required the collaboration of many people. A log kept throughout the project indicates that in addition to the 128 people who took the time to complete our questionnaire at least 25 others made significant contributions during various phases of the study. We are grateful to the participants and to those who helped in other ways with the realization of this project.

FIGURE CAPTIONS

Figure 1. Recommendations made by disabled students, by professors who have taught disabled students and by professors who have not done so.

Figure 2. Recommendations made by disabled students, by professors who have taught disabled students and by professors who have not done so.

Figure 3. Recommendations made by disabled students, by professors who have taught disabled students and by professors who have not done so. Item numbers preceded by the letter S refer to services, those preceded by F refer to facilities, those preceded by E refer to equipment/resources, and those preceded by O refer to other recommendations.

ASSERTIVENESS TRAINING FOR DISABLED INDIVIDUALS IN WHEELCHAIRS: AN INITIAL EVALUATION

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ABSTRACT

Physically disabled adults in wheelchairs from the Ottawa-Hull region were asked to participate in an initial evaluation of an 11-week assertiveness training program. All 28 participants, 21 females and seven males, used a wheelchair device at least 50% of the time outside the home. The medical conditions of the subjects included spinal cord injury (*n*=7), multiple sclerosis (*n*=9), cerebral palsy (*n*=3), spina bifida (*n*=3), and other neuromuscular disorders (*n*=6). Each participant was asked to complete a battery of self-report questionnaires, and a modified version of the Activity Pattern Indicators. The questionnaire measures consisted of the Rathus Assertiveness Schedule, the Social Assertion Inventory, and the Acceptance of Disability Scale. A repeated measures design was employed to assess the effects of assertiveness training at two time intervals (posttest and six-month follow-up). Substantial increases in assertiveness, social comfort, and acceptance of disability were evidenced at both the posttest and six-month follow-up. In contrast, only one of six planned comparisons between pre- and posttreatment activity levels was statistically significant. The methodological limitations of the initial evaluation are discussed.

ASSERTIVENESS TRAINING FOR DISABLED INDIVIDUALS IN WHEELCHAIRS: AN INITIAL EVALUATION

Individuals with overt physical disabilities are likely to confront a number of difficulties in social interactions. Devaluing attitudes, embarrassing social situations associated with the disability, and inconsistent behavioural reactions of the nondisabled are examples of common stressors disabled persons face (Glueckauf & Quittner, 1984). Prior research has shown that nondisabled people tend to avoid interactions with the disabled (Kleck, 1968; Kleck, Ono, & Hastorf, 1966).

A different process has been observed when social transactions cannot be easily avoided. Under these conditions the nondisabled tend to employ anxiety-reducing strategies such as adopting attitudes similar to the disabled individual (Kleck et al., 1966; Schlenker, 1980). As a result of these social biases, disabled persons may not receive honest feedback about their behaviour, in particular ineffective or inappropriate responding. It is our contention that successful social functioning may thus depend on the disabled person's ability to put others at ease, elicit their feedback, and to suggest alternate strategies of social interaction (cf., Dunn & Herman, in press).

Assertiveness training (AT) has been shown to increase social skills and social problem-solving in a variety of medical and nonmedical populations (cf., Galassi & Galassi, 1978, for a review). However, systematic application and evaluation of assertiveness training for the physically disabled has only recently been employed (e.g., Dunn, VanHorn, & Herman, 1981; Mishel, 1978; Morgan & Leung, 1980). In a landmark investigation Dunn et al. (1981) randomly assigned 22 spinal cord injured male veterans to one of four treatment conditions: (a) assertiveness training, (b) assertiveness training and a modeling film, (c) modeling film only, and (d) no treatment control (i.e., ward milieu). Substantial differences among the conditions were found on a videotaped roleplay test (cf., Eisler, Hersen, & Miller, 1973). Both assertiveness training groups made significantly larger gains on the behavioural measures (i.e., requests for new behaviour, assertive refusals, and overall effectiveness ratings) than the film-only and no treatment controls. No significant differences were found among the four conditions on self-report measures of assertiveness and social anxiety.

Similar findings on the roleplay measures of assertiveness have been reported in two other studies using adult disabled participants with neurologic and mobility handicaps (Mishel, 1978; Morgan & Leung, 1980). Both teams of researchers, however, found significant posttreatment gains on self-report measures (e.g., Rathus Assertiveness Schedule). Thus, the overall pattern of results suggested that AT leads to increased social skills for physically disabled individuals. Note that caution should be exercised in interpreting the results of these early investigations. Differences in treatment procedures, lack of replication, and the absence of follow-up data limit the causal conclusions which can be drawn. We have attempted to ameliorate these methodological inadequacies in the current investigation of the effects of assertiveness training for disabled individuals in wheelchairs.

Hypotheses

The overall objective of the AT program was to facilitate the social adjustment of disabled wheelchair users in the community. The specific hypotheses tested in the study were as follows: (a) AT participants were predicted to report significantly higher levels of assertiveness in both general and disability-related social situations at the posttesting and at the six-month follow-up; (b) participants were predicted to show substantial decreases in social anxiety in disability-related situations at both the posttesting and the six-month follow-up; (c) a significant shift toward greater acceptance of disability at the posttesting and at the six-month follow-up was also hypothesized; (d) unemployed participants were predicted to report significant increases in the diversity of weekly activities, the frequency of outside activities, and the frequency of activities involving social contact at both the posttesting, and six-month follow-up. In contrast, employed subjects were expected to make no significant alterations in their activity patterns. Note also that no substantial changes in either the self-perception or activity measures were expected from posttesting to the six-month follow-up.

Method

Subjects

Volunteer subjects were recruited using a variety of procedures, including media advertisement, public lectures, and referrals from community organizations. Twenty-eight persons in wheelchairs who resided in the Ottawa-Hull region were included in the initial phase of the AT project.[1] Two subjects, one male and one female, withdrew from the program after one and four sessions, respectively. A total of 26 individuals completed the 11-session training program. The demographic and medical characteristics of the Ottawa sample are displayed in Table 1.

Assessment and treatment procedures

The major criterion for acceptance into the AT project was use of a wheelchair (or similar device) at least 50% of the time outside the home. In addition,

TABLE 1

Background Characteristics[a] of Assertiveness Training Groups

Variable	Group			Overall
	I	II	III	
	n=9	*n*=10	*n*=9	*N*=28
Mean Age	30.8 (6.16)	42.7 (12.14)	41.6 (14.76)	38.5 (12.41)
Mean Years of Education	12.6 (1.59)	14.4 (2.17)	11.7 (2.57)	12.9 (2.36)
Median Age at Onset	19.0	26.5	16.0	19.8
Females	4	7	9	20
Married/ Common Law[b]	1	6	2	9
Employment Status				
Full-time employment (5 days/week)				10
Part-time employment (2 days/week)				1
Part- or full-time volunteer work (16 or more hours/week)				3
Student				1
Unemployed				13
Medical Condition				
Spinal Cord Injury				7
Multiple Sclerosis				9
Cerebral Palsy				3
Spina Bifida				3
Other neuromuscular disorders				6

[a] Standard deviations are within parentheses.

[b] Of the remaining 19 subjects, 13 were single, 3 were separated, 2 were divorced and 1 widowed.

subjects were initially screened for average recall and reading abilities using the Peabody Individual Achievement Test-Reading Comprehension subtest (PIAT; Dunn & Markwardt, 1970) and the Wechsler Memory Scale Form 1 (WMS; Wechsler, 1945). Subjects who performed below a sixth grade reading level on the PIAT or scored lower than one standard deviation below the mean on the WMS were offered alternate therapeutic interventions (i.e., individual or couples assertiveness training). After satisfying the screening requirements, all subjects were pretested on the dependent measures. The posttest assessments were conducted one week and six months following the completion of the course.

A total of three AT groups (see Table 1 for data on group composition) were run from April, 1982 to December, 1983. Each treatment group met in the evening for 2½ hours once a week for 11 weeks. The program consisted of nine group sessions, and two goal-implementation sessions during which each group member practised his or her personal assertiveness goal(s) with a co-participant and the two AT co-therapists. One female and one male therapist, who possessed on the average three years of training in group behaviour therapy, served as the group leaders.

The format for the nine group sessions was as follows. First, participants were asked to discuss the results of their outside assignments (e.g., practice exercises in providing feedback). This was followed by a half-hour didactic presentation including audiovisual material and therapist modeling of relevant skills. The second half of the session consisted of discussion and videotaped roleplaying of structured vignettes. Last, the group leaders reviewed the next week's outside assignments which included selected readings from the Alberti and Emmon's (1984) Your Perfect Right: A Guide to Assertive Living, and practice of communication skills.

The content of the AT program reflected the theoretical assumptions of the investigators (cf., Glueckauf & Quittner, 1984; Lazarus, 1976). Assertiveness in awkward social situations was hypothesized to be a function of the individual's level of social anxiety, perceptions of self-efficacy, and actual performance skills (i.e., verbal and non-verbal). As seen in Table 2, sessions 3-4 focus on the performance dimension, session 5 on cognitions related to self-efficacy and anger control, and session 6 on practice of relaxation methods.

TABLE 2

Brief Description of Assertiveness Training Program

Session 1 :	Introduction to assertiveness training.
Session 2 :	Distinguishing among passive, aggressive and assertive behaviour.
Session 3 :	Practice in basic listening skills.
Session 4 :	Providing feedback and managing awkward disability-related situations.
Session 5 :	Ineffective thinking and identification of assertive rights.
Session 6 :	Practice of autogenic and progressive relaxation skills.
Session 7 :	Expressing frustration and anger in an assertive fashion.
Session 8 & 9:	Implementation and practice of individual assertiveness goals.
Session 10 :	Group practice of assertiveness goals and goal attainment scaling.
Session 11 :	Social networks and techniques for maintaining gains.

Dependent Measures

The dependent measures consisted of a battery of paper-and-pencil questionnaires, a modified version of the Behavioural Assertiveness Test (BAT-R; Eisler et al., 1973; Dunn et al., 1981), and a shortened form of the Activity Pattern Indicators (API; Brown, Diller, Gordon, Fordyce, & Jacobs, 1984).[2] The paper-and-pencil measures included the Rathus Assertiveness Schedule (RAS; Rathus, 1973), the Acceptance of Disability scale (AD; Linkowski, 1971), and the Social Assertion Inventory (SAI), a modified version of the Spinal Cord Injury Assertiveness Questionnaire (Dunn & Herman, in press), consisting of two scales, social anxiety and likelihood of assertive responding.

In addition to the paper-and-pencil measures, subjects were requested to keep a daily diary for one week during the pretest, posttest, and follow-up assessment phases. The daily diary was a modified version of the Activity Pattern Indicators consisting of 69 items. The activity categories measured by the modified API were work, travel, education, recreation, social activities, child care, and household business. Subjects recorded both the activities (e.g., attend a concert) they performed each day and whether the activities involved a social contact. A social contact was defined as any verbal interaction between the participant and at least one other person, excluding brief "hi-and-goodbye" transactions. The API diary data were collected over the telephone by a trained research assistant at the end of the seven-day assessment period.

Based on prior research with the API (Brown et al., 1984), the data were analyzed in terms of three activity dimensions: (a) diversity of activities [the total number of different activities (0-69) in which subjects engaged during the week]; (b) out activities [the total number of days (0-7) the participants performed each of the 69 activities outdoors], and (c) outside activities with social contact [the total number of days (0-7) the subjects had a social contact while performing an outdoor activity].

Results

Pretreatment Measures

One-way analyses of variance were performed on the background characteristics of the subjects and the seven dependent measures to test for pretreatment differences among the three AT classes. Group composition (see Table 1) was shown to differ on the following factors: sex of subject, marital status, age at onset and current age (p's $< .02$). However, no significant correlations were found between these variables and the subjects' pretest questionnaire and activity pattern scores. It should also be noted that no significant group differences were obtained on any of the dependent measures.

Treatment Effects

A repeated measures MANOVA was employed to test the main effects of treatment phase (the within factor) on the measures of assertiveness and acceptance of disability. The within factor was the phase of treatment (pretesting, posttesting, and six-month follow-up). In addition, one-between, one-within ANOVAs were conducted on the activity pattern measures. Based on the findings of prior research with the API (Diller, Fordyce, Jacobs, Brown, Gordon, Simmens, Orazem, & Barrett, 1983; Gordon, 1982), employment status (employed vs. unemployed) was included as a blocking factor.[3] Treatment phase was the within-cells factor. Note that multivariate analyses on the activity data were not performed, since there was high interdependence among the three API measures. Last, the critical value for all univariate statistics was set at $p < .02$ (Bonferroni correction).

A significant averaged effect of treatment phase was obtained for the questionnaire measures (Wilks Lambda = .46, F (8,94) = 5.59, $p < .0001$). Follow-up univariate F-tests (see Table 3) showed substantial differences at both the posttest and six-month assessment intervals. All four measures showed a statistically significant shift toward increased assertiveness, social comfort, and acceptance of disability from pretest to posttest. On the average these gains were maintained at the six-month follow-up. No significant mean differences were found between the posttest and six-month follow-up on the two SAI measures. A slight drop in the means for the AD scale was noted, whereas significant posttest to follow-up increases were found for the RAS (see Table 4 for a display of the questionnaire means).

A different pattern of results was obtained for the three API measures. The predicted interactions between employment status and treatment phase were found in only one of six planned comparisons (i.e., outside activities from pretest to posttest). It should be noted that the obtained effect was the result of an unanticipated crossover interaction. Employed subjects evidenced a decrease in their rate of outside activities, whereas unemployed participants showed substantial gains. As previously discussed, employed participants were predicted to maintain stable activity levels from pretest to posttest on all three API measures. Although the interactions between employment status and phase of treatment were not statistically significant, the overall pattern of the interaction cell means was in accord with the experimental hypotheses. As shown in Table 5, unemployed subjects showed increases in their activity rates from pretest to posttest, whereas employed

TABLE 3

MANOVA and ANOVA Results for Questionnaire Measures

Pretest to Posttest --Wilks' Lambda = .34;
$\underline{F}(4,22) = 10.51$, $\underline{p} < .0001$

	≲ ta^2	$\underline{F}$	$\underline{p}$ value
RAS[a]	.20	36.92	.00
SAI - Anxiety[b]	.07	12.22	.00
SAI - Likelihood[c]	.03	18.79	.00
AD[d]	.15	15.36	.00

Posttest to Six-month Follow-up--Wilks' Lambda = .52;
$\underline{F}(4,22) = 5.02$, $\underline{p} < .006$

	≲ ta^2	$\underline{F}$	$\underline{p}$ value
RAS	.02	1.46	.24
SAI - Anxiety	.00	.62	.44
SAI - Likelihood	.00	.45	.51
AD	.03	2.77	.11

Pretest to Six-month Follow-up--Wilks' Lambda = .49;
$\underline{F}(4,22) = 5.68$, $\underline{p} < .003$

	≲ ta^2	$\underline{F}$	$\underline{p}$ value
RAS	.31	19.67	.00
SAI - Anxiety	.03	5.52	.03
SAI - Likelihood	.01	7.08	.01
AD	.04	3.65	.07

[a] RAS - Rathus Assertiveness Schedule
[b] SAI - Social Assertion Inventory - Anxiety
[c] SAI - Social Assertion Inventory - Likelihood
[d] AD - Acceptance of Disability

TABLE 4

Means and Standard Deviations[a] for Questionnaire Measures

Measure	Prestest	Posttest	Six-Month Follow-up
Rathus Assertiveness Schedule	-9.32 (31.20)	9.85 (28.06)	15.08 (25.65)
Social Assertion Inventory - Anxiety Rating	51.85 (21.63)	40.96 (12.97)	43.35 (16.16)
Social Assertion Inventory - Likelihood Rating[b]	54.02 (13.97)	46.42 (9.92)	47.85 (12.79)
Acceptance of Disability	219.98 (42.42)	236.15 (35.78)	230.04 (33.05)

[a] Standard deviations are within parentheses.

[b] Scored in reverse direction (i.e., the lower the score, the higher the likelihood of assertive responding).

TABLE 5

Means and Standard Deviations[a] for Activity Pattern Indicators by Employment Status[b]

Measure	Pretest		Posttest		Six-month Follow-up	
	U[c]	E[d]	U	E	U	E
Out Activities	16.54 (11.11)	36.25 (12.51)	22.62 (11.33)	30.08 (13.23)	22.31 (10.05)	35.58 (21.16)
Out Activities with Social Contacts	14.77 (9.53)	30.33 (12.77)	19.62 (10.13)	25.33 (13.05)	19.54 (9.17)	25.58 (18.38)
Diversity of Activities	25.08 (6.12)	29.67 (7.00)	29.62 (9.59)	31.83 (6.93)	31.54 (8.78)	30.00 (8.40)

[a] Standard deviations are within parentheses.
[b] See footnote 3 for the criteria used to categorize employment status.
[c] U = unemployed.
[d] E = Employed.

participants' activity rates remained the same or decreased. No substantial changes in both unemployed and employed subjects' activity rates were observed from the posttest to the six-month follow-up.

Discussion

Considerable support was found for the predictions of increased assertiveness, social comfort, and acceptance of disability at both the posttest and the six-month follow-up evaluations. The high level of convergence among the RAS, SAI, and AD measures further substantiated the validity of the questionnaire results. Nonetheless, the possibility of social desirability responding still remains. There is indirect evidence, however, that the measures of assertive behaviour employed in the current study may not have been highly susceptible to desirability bias. In a recent construct validity study, Rock (1981) found that among several assertiveness inventories, the RAS showed the smallest correlation with the Edwards scale of social desirability. Since gains on the RAS accounted for the largest proportion of variance from pre- to posttest ($Eta^2 = .20$) and from pretest to the six-month follow-up ($Eta^2 = .31$), increases on the questionnaire measures most likely reflected altered propensities to respond assertively in both wheelchair-related and common social situations.

In contrast, little support was obtained for increased activity levels among unemployed as compared to employed participants. A major limitation of the present study was its small sample size ($\underline{n}=28$). The capacity to detect the effects of a treatment intervention on client behaviour is inextricably linked to sample size. The larger the sample size, the greater the likelihood of detecting true differences in the activity levels of subjects before and after treatment.

We have recently completed the second year of the assertiveness training project at the University Hospital and have increased our sample size to 50 participants in wheelchairs. If the trends in the Ottawa activity pattern data are replicated in the three London-based training groups, the predicted interactions between employment status and treatment phase are likely to be obtained. Nonetheless, it is entirely possible that the current AT program has no substantial effects on the social mobility of individuals in wheelchairs. Significant alterations in activity patterns may not result from assertiveness training procedures which predominantly focus on the qualitative dimensions of interpersonal behaviour. If this is the case, we should see significant gains on both the questionnaire and BAT-R (i.e., roleplay) measures with little or no fluctuation in activity patterns at the posttest and at the six-month follow-up. These questions will be addressed in the final report of the AT project.

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FOOTNOTES

[1] The Assertiveness Training Project for Disabled Individuals in Wheelchairs was conducted in two locations over a period of three years. The initial phase (18 months) of the project was carried out at the Royal Ottawa Regional Rehabilitation Centre, Ottawa, Ontario; the second half (18 months) was conducted at the University Hospital, London, Ontario. The results of the Ottawa investigation are presented in the current report.

[2] The BAT-R is a videotaped roleplay test consisting of 16 vignettes performed by the disabled participant and a nondisabled research assistant. One-half of the vignettes assess general assertiveness skills (e.g., asking for the return of an overdue loan); the remaining eight scenes measure skills in managing awkward disability-related situations (e.g., falling out of the wheelchair). The results of the Ottawa roleplay tests were not completely analyzed at the time of this report.

[3] Subjects were placed into the "employed" category if they met at least one of three criteria: (a) paid employment for 16 hours/week or longer; (b) unpaid employment (volunteer work) for 16 hours/week or longer; or (c) part-time or full-time student status in a pre-vocational or academic program. Persons who did not meet these criteria were categorized "unemployed".

EMPLOYMENT OUTCOME IN A SAMPLE OF CANADIAN CLOSED HEAD INJURY PATIENTS

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ABSTRACT

Employment outcome data are presented for 78 closed head injury patients, assessed 2-4 years post-injury, at Sunnybrook Medical Centre, Toronto. Follow-up indicated that 78.3% of the participants were employed (included students) at the time of assessment (vs. 94.9% pre-injury). Despite the high rate of post-injury employment, enduring qualitative changes in work performance were reported by a substantial subset of the patients on the Work subscale of the Sickness Impact Profile (SIP). An item analysis indicated that the most common difficulties for employed subjects were heightened irritability with co-workers (19.7%) and reduced productivity (9.8%). Based on the severity of head injury (measured by initial Glasgow Coma Scale scores), the return to work for severely (n=23), moderately (n=8) and mildly (n=47) injured patients was 52.2%, 75.0% and 93.6%, respectively. In addition, the most severely injured group had significantly more subjective complaints on the SIP than the other two less severely injured groups. These data indicate poorer vocational success for more severely injured patients and suggest a role for rehabilitation in work reentry for these patients.

EMPLOYMENT OUTCOME IN A SAMPLE OF CANADIAN CLOSED HEAD INJURY PATIENTS

The last several decades have seen the increased delineation of the neurological (Ommaya & Gennarelli, 1974), psychological (Levin, Benton, & Grossman, 1982; Newcombe, 1982), emotional (Levin & Grossman, 1978; Lishman, 1978) and psychosocial (Bond, 1975; Oddy, Humphrey, & Uttley, 1978) sequelae of head injury.

A particularly critical aspect of the psychosocial impact of head injury is post-injury employment patterns.

To date, the rate of return to work for severely head-injured patients has varied between approximately 40-75% (Bruckner & Randle, 1972; Gilchrist & Wilkinson, 1979; London, 1967; Maciver, Lassman, & Thompson, 1958; Weddell, Oddy, & Jenkins, 1980). One factor which has been suggested as significantly affecting employment outcome is severity of head injury. The above employment outcome studies were confined to severely injured patients. In addition, severe injuries involving a fractured skull, unconsciousness > 6 hours, intracranial hemorrhage or neurosurgery (Brennan, 1981), increased brain destruction (determined by depth of injury) and increased length of coma (Dresser et al., 1973; Gilchrist & Wilkinson, 1979) have been reported to be associated with significantly reduced post-injury employment rates in patients sustaining open or blunt head injuries.

Increased severity or neuropsychological deficits have also been related directly to reduced post-injury employment in a variety of populations, including those with head injury (Barth et al., 1983; Heaton, Chelune, & Lehman, 1978; Heaton & Pendleton, 1981; Weddell et al., 1980).

The above research has not been conducted with Canadian samples. As a consequence, the current study has attempted to evaluate post-injury employment outcome in a sample of 78 Canadian head injury patients. Pre-injury employment rates and positions are provided in order to help provide a context in which to evaluate post-injury employment data. In addition, subjective self-report by patients of post-injury qualitative changes at the work setting will be included. Lastly, the role of severity of head injury in employment outcome will be provided.

Method

A. Subjects

This study utilized 78 patients with a diagnosis of closed head injury (CHI) who had been admitted to Sunnybrook Medical Centre, Toronto, 2-4 years previous to the time of evaluation. Code types utilized to select the patients were based on the International Classification of Diseases (9th Revision) and included codes 800, 801, and 850-854, inclusive. Participation was limited to patients aged 17-40 years at the time of injury. Any individual with a previous head injury involving loss of consciousness or pre-accident history of psychiatric institutionalization or alcoholism was excluded.

All participants were volunteers who agreed to participate in a follow-up study of quality of life and neuropsychological functioning. This paper summarizes only selected aspects of employment outcome data, and other data describing post-injury quality of life and neuropsychological functioning are reported in detail elsewhere (Klonoff, 1984).

Pre-injury data were in accord with other recent studies (Annegers, Grabow, Kurland, & Laws, 1980; Rimel, Giordani, Barth, Boll, & Jane, 1981; Rimel, Giordani, Barth, & Jane, 1982) in that, at the time of injury, participants were primarily male (82.1%), young (60.2% age 17-25) and single (62.8%). Most of the patients had not completed high school (64.1%).

Review of injury-related data indicates that the closed head injuries were most often sustained as a result of motor vehicle accidents (MVA) (62.9%). Sports and falls caused an additional 17.9% and 15.4% of the head injuries, respectively. Of the sample, 48.7% were admitted as multiple trauma patients and 74.4% sustained injuries to other bodily systems, even though some of these patients were not admitted to the trauma unit.

Severity of head injury was determined by initial Glasgow Coma Scale (GCS) scores (Teasdale & Jennett, 1974) recorded at the time of admission to hospital. There was a range in severity of injury, with 60.3% sustaining mild injuries (scores 11-14); 10.2% sustaining moderate injuries (scores 8-10) and 29.5% sustaining severe injuries (scores ≤ 7). Patients were also assigned to mild (n=47), moderate (n=8), and severely (n=23) head injured groups, based on their initial GCS scores.

B. Procedure

Patient participants were interviewed and completed several quality of life inventories. These included the Sickness Impact Profile (SIP) (Bergner, Bobbitt, Pollard, Martin, & Gilson, 1976). The SIP is a self-report measure of health-related dysfunction which evaluates a wide range of quality of life domains. It consists of 12 categories of activities, including work. Patients were instructed to read each item of the questionnaire and endorse it if it applied to them as a result of their accident. Other aspects of pre- and post-injury employment were obtained through the interview.

Results

Table 1 summarizes the change in employment rates from pre- to post-injury.

TABLE 1

Frequency Analyses of Employment Status (n=78)

Employment Status	At time of Injury (%)	At Time of Assessment (%)
Working	80.8%	61.5%
Not Working	5.1	17.9
Student	12.8	10.3
Student & Part-Time Work	0.0	2.6
Working Full-Time and Part-Time Student	0.0	2.6
Housekeeper	1.3	1.3
Rehabilitation	0.0	3.8

Note that 94.9% of the sample were employed pre-injury (includes students and one housekeeper), and that this figure dropped to 78.3% post-injury. Of all the patients, 13.2% were off work for a relatively short period of time post-injury (0-13 days) versus 52.7% who took a more substantial period of time off work (0.05-.3 year). The other figures were 11.9% off for .4-.9 year, 9.1% off for 1.0-1.8 years, and 13.1% off for 2.0-3.3 years. As can be seen, a noteworthy proportion of patients (22.2%) were off work longterm post-injury (1.0-3.3 years).

Table 2 summarizes the highest levels of employment obtained pre- and post-injury. Review of the highest level of occupation within a two year period pre-injury indicates that the largest category was students (21.8%). An additional 52.6% of the subjects represented the Hollingshead (1975) categories 1-5 (i.e., menial service workers; unskilled workers; machine operators and semiskilled workers; skilled manual workers; clerical and sales workers).

TABLE 2

Highest Hollingshead* Employment Categories Attained

Hollingshead Category	Within 2 Years Pre-Injury (%)	Post-Injury (%)
Menial Service Workers	2.6	2.6
Unskilled Workers	12.8	7.7
Machine Operators/ Semi-skilled Workers	14.1	14.1
Skilled Manual Workers	16.7	11.5
Clerical & Sales Workers	6.4	5.1
Technicians, Semiprofessionals	6.4	11.5
Minor Professionals	11.5	11.5
Administrators	5.1	5.1
Higher Executives	1.3	1.3
Students	21.8	15.4
Housekeepers	1.3	1.3
Sheltered Workshop/ Rehab Program	0.0	3.8
Unemployed	0.0	9.0

* First 9 categories derived from Hollingshead Scale (1975).

Comparison of the highest level of employment pre- and post-injury indicates some differences in patient distributions. Note that unemployment was the best that 9.0% of the sample could achieve post-injury. There were fewer lower status positions post-injury, including unskilled workers (12.8% pre- versus 7.7% post-injury), fewer skilled workers and small business owners (16.7% pre- versus 11.5% post-injury) and fewer clerical and sales workers, larger farm and business owners (6.4% pre- versus 5.1% post-injury). There were however, slightly more technicians, semiprofessionals and large business owners post-injury (6.4% pre- versus 11.5% post-injury).

Table 3 summarizes the item analysis of the Work subscale of the SIP for the total sample. Relative frequencies for questions 2-9 represent the proportion of the employed patients (n=61) who endorsed each item.

TABLE 3

Item Analysis of the Work Subscale of the SIP

		Rel. Freq. (%)
1.	I am not working at all	21.7
2.	I am doing part of my job at home	1.6
3.	I am not accomplishing as much as usual at work	9.8
4.	I often act irritable toward my associates, for example, snap at them, give sharp answers, criticize easily	19.7
5.	I am working shorter hours	4.9
6.	I am doing only light work	0.0
7.	I work only for short periods of time or take frequent rests	1.6
8.	I am working at my usual job but with some changes, for example using different tools or special aids, trading some tasks with other workers	6.6
9.	I do not do my job as carefully and accurately as usual	4.9

Note that the most highly endorsed items were: "4. I often act irritable toward my associates, for example, snap at them give sharp answers, criticize easily," (19.7%), and "3. I am not accomplishing as much as usual at work" (9.8%).

An Analysis of Variance (ANOVA) on the SIP work subscale yielded a significant F value of 8.34 (df=2, $p < .0005$). When the Duncan Multiple Range Test was applied, using severity of injury as the group variable, the group means of 31.76 (Severe), 8.80 (Moderate), and 8.45 (Mild) indicated that the moderately and mildly injured groups did not differ significantly from each other, but that the severely injured group was significantly different from the other two.

The SIP Work subscale was scored according to the original authors (Bergner et al., 1976), in which items were assigned weighted values and divided by a total subscale score. Results indicated that the most severely head injured patients (Group 1: GCS scores ≤ 7) endorsed significantly more items on this subscale than did the other two less severely injured groups. A mean subscale score of 31.76 is suggestive of a moderate degree of work dysfunction, especially at the chronic post-injury phase of recovery. In addition, the rate of return to work decreased in relation the severity of head injury, as 52.2% of the severely injured group, 75.0% of the moderately injured group, and 93.6% of the mildly injured group returned to post-injury employment.

Discussion

The preset study indicates that 94.9% of the sample were employed at the time of injury, versus 78.3%, 2-4 years post-injury. Despite the eventual return to work for the majority of patients, most patients experienced some disruption in work activities related to time off work, at least during the acute post-injury phases. The finding of lengthy recovery periods preceding the return to work is similar to data of Weddell et al., (1980), in which subjects were off work 6-18 months post-injury, following severe head injuries. However, as many of the participants in the current study sustained milder injuries, the current findings suggest that substantial disruption in work can also be experienced by less severely injured patients.

Although the majority of patients returned to work, review of qualitative aspects of job performance, employing patient self-report on the Work subscale of the SIP, indicated that a moderate proportion of the overall sample reported difficulty with interpersonal relationships on the job (e.g., more irritability with co-workers (19.7%)) and reduced productivity (9.8%). These data suggest that despite the return to work, there can be enduring changes in the qualitative aspects of functioning in the work setting. These difficulties may negatively affect interpersonal relationships and job performance, even 2-4 years post-injury.

The distribution of job positions also shifted following the injury, with fewer lower status positions. This may be partially attributed to the finding that 9.0% of the patients had not worked post-injury and 3.8% of the participants were in rehabilitation programs. In addition, manual labor jobs may be less easily performed due to physical limitations following significant injuries. The slight increase in the proportion of technicians, semiprofessionals and large business owners post-injury may reflect an absorbance of students into the work force.

In addition to the above findings, severity of head injury was found to affect the rate of return to work and eventual job performance. The rate of employment declined in relation to the severity of injury, with only 52.2% of the severely injured group employed 2-4 years post-injury. These findings are less favorable than other studies (London, 1967; Maciver et al., 1958), which reported that approximately 65-75% of their samples of severely injured patients returned to some form of employment. Patients with more severe injuries (i.e., GCS scores ≤ 7) also more often endorsed job-related difficulties, on the SIP self-report questionnaire, suggesting a relationship between increased severity of injury and poorer vocational success. A mean subscale score of 31.76 for the severe head injury group is suggestive of a moderate degree of work-related dysfunction, especially when this finding is placed in the context of longterm follow-up.

The finding of the current study that approximately one-half of the severely injured patients were unemployed, 2-4 years post-injury, underscores the significant longterm impact of these injuries on psychosocial functioning. In addition, it suggests that rehabilitation efforts in Canada should be directed towards work reentry to help reintegrate these patients into work settings. Such intervention may involve retraining patients for less demanding work positions, due to physical and/or cognitive disabilities. Return to work would enable patients to become more productive and independent. It is hoped that results provided by the current study will be integrated into rehabilitation goals in Canada in the future.

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AN ANALYSIS OF ROLE SALIENCE AND VALUES IN AN ALLIED HEALTH PROFESSION

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ABSTRACT

A national study of occupational therapists (N=1400) was undertaken to provide a foundation for a career pattern study in this occupational group. Analysis of data from the Life Roles Inventory indicates that female respondents (N=1366) consistently highly endorse the same values regardless of age or position level (personal development, ability utilization, social relations, altruism, automy and achievement). Some differences are noted in relation to education level. The level of work salience (importance) is high across the total sample, with the home/family role registering as the most important role for the majority of respondents. This data is compared to that available from a Canadian sample of female respondents employed in other professional/ managerial categories (N=1000).

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AN ANALYSIS OF ROLE SALIENCE AND VALUES IN AN ALLIED HEALTH PROFESSION

Federal and provincial manpower statistics consistently reveal the shortage of allied health personnel in Canada. Problems surrounding manpower planning in health care, specifically as it relates to the hospital sector were discussed at a "participant driven seminar" sponsored by Canada Employment & Immigration (Ottawa, February 25-26, 1985). The need for occupational therapists was seen as a critical issue.

Results of two studies focusing on career development issues in occupational therapy will be reported, presenting a provincial and national perspective. In the latter a comparison between female occupational therapy respondents and females working in professional/managerial categories outside of allied health (the non-occupational therapists) provides an interesting contrast in terms of priorities and values. Chronic manpower shortages in occupational therapy are not solely the result of underproduction by university programs, but are likely contributed to by interrupted career patterns in this female dominated occupational group.

The sample in the provincial career pattern study (later referred to as the Alberta study) was composed of two groups: therapists employed in a managerial capacity and therapists working in non-traditional settings, schools, community centres, private practice (N=75) as well as those no longer or not currently practicing (N=34). Here interest was in the two ends of the continuum that are represented by therapists who had demonstrated career advancement and those who had chosen to stop working.

From the career pattern study involving two groups of occupational therapists in Alberta (N=119) (Madill, Brintnell, Stewin, Fitzsimmons & Macnab, 1985), the interrupted career pattern that has been described by Super (1978) was common, although it was demonstrated that these therapists were very committed to their working role. The home/family role, which was also strongly endorsed, was a source of constant competition during the same years in which upward mobility is expected to occur within a professional career.

In a recent review of occupational therapy literature relating to professional socialization, Sabari (1985) noted that "interpersonal sensitivity", "empathy", "non-controlling and non-authoritarian behavior" and "open-mindedness" are "patient-related values" which are highly respected within the profession. It is possible that by giving priority to values that are so strongly aligned to care giving, occupational therapists do not actively plan and direct their own career development.

The fact that career ladders are exceedingly short for occupational therapists in traditional hospital settings further complicates the picture. Generally, some form of junior or senior classification exists (Grade I and Grade II are used in Alberta). From there any upward mobility as a clinician is severely limited. Edelwich & Brodsky (1980) described the situation well when they stated that

> For most people who come into the helping professions (as most do) to work directly with people, it is frustrating to learn that the surest and sometimes the only route to advancement is not through front-line involvement with clients, but through supervisory and administrative work...[which] entails working less with people and more with official forms, budgets and subordinate staff members.

Clinical specialists (clinical experts in adult neurology, orthopedics, pediatrics, etc.) in occupational therapy are for the most part only informally recognized by their peers. This status may also be unofficially acknowledged within the individual department, but is seldom a formal occupational level differentiated by salary, policy-making authority, or decision-making power.

From the Alberta study it was obvious that in order to advance in occupational therapy as a career, and still maintain a clinical as opposed to an administrative focus, individuals must seek positions outside the traditional hospital setting. Such positions exist in community health centers, home care programs, schools, community mental health settings and private practice. The autonomy, challenge, creativity and advancement that many of these therapists sought was not possible in the traditional medical hierarchy.

When the values of these two groups of Alberta therapists were measured using the Life Roles Inventory (Fitzsimmons, Macnab & Casserly 1984), the homogeneity of values endorsed by the respondents was striking.

Personal development, ability utilization, achievement, creativity, social relations and altruism were all important to these therapists and endorsed between 3.3 and 3.7 on the four-point scale, while variety, physical activity, cultural identity, aesthetics, risk and physical prowess were of less importance, being endorsed between 1.5 and 2.8. When the values endorsed by therapists who were employed in non-traditional settings and managerial positions were compared with those who were no longer or not currently practicing, the Life Roles Inventory was able to discriminate between them on both value and role salience scales. Those in managerial/non-traditional settings were more likely to cite creativity and economics as more important than those who were not practicing. They also rated the work role as significantly more important, while those who were not practicing placed the home/family role in that position, the level of significance in each case being < 0.001. The question as to whether this could be a regional artifact arose and a national study was completed during 1984/85. Data from other female professional respondents, that was collected as part of the standardization of the Life Roles Inventory, is now available which provides an excellent opportunity to compare occupational therapists' responses with those from other females outside of the allied health occupations. Results may have implications for the career management strategies that are necessary for occupational therapists to develop, should they aspire to leadership positions in the rehabilitation area.

Method

To be eligible to participate in the national study, therapists had to reside in Canada, have completed their professional qualifications and be eligible to practice occupational therapy in this country. 2627 eligible participants were located.

Two mailings were used, as this was found in the Alberta study to be the most effective method of preventing substantial loss of the inventories (thus reducing the expense of mailing duplicate copies). A letter of invitation and agreement to participate were forwarded first. The option of not participating was also provided in an effort to eliminate such therapists from the master list and therefore from follow-up mailings. (216 therapists indicated they did not wish to participate.)

When completed agreements were returned, the second mailing containing three vocationally related inventories (the Life Roles Inventory, Vocational Preference Inventory and Minnesota Job Satisfaction Questionnaire) were forwarded. A total of 1366 packages were completed by female respondents. Data from the national norming study of the Life Roles Inventory (Fitzsimmons, Macnab & Casserly, 1984A) was available for comparison purposes and as the responses of males and females have been found to vary in the values they endorse, males were removed from this comparison. From this normative sample all of the female respondents in the professional/managerial category were used (N=1000).

In terms of age and income level the subgroups are very similar. However, the occupational therapy subgroup had more years of education and a greater proportion of these respondents were married. This group also had a higher proportion of landed immigrants or permanent residents and a much lower representation of native persons within its ranks. When respondents are considered by province, it should be noted that 119 therapists participated in the Alberta study which excluded them from participation in the national study. The higher proportion of occupational therapy respondents for Quebec, Ontario and British Columbia appears to reflect the national manpower picture.

Instruments

For the purposes of this paper, only the results of the Life Roles Inventory (LRI) will be considered. The LRI was used to determine what elements or values were most important to respondents, to identify the degree of participation, commitment, and role value that respondents assign to the five major life roles. It is a self administered inventory with two major sections: a values inventory which measures the importance of specific values, and a salience inventory that measures the importance of specific roles (Casserly, 1982).

Coefficient alpha internal consistency reliabilities computed for each of the value scales range from 0.72-0.86 with a median of 0.80. Internal consistency co-efficients for participation range from 0.85-0.95, for commitment 0.89-0.95, and for the role values 0.87-0.90. Reliability data were derived from 6382 English and French-speaking adults collected across Canada as part of the standardization of the LRI (Fitzsimmons, Macnab & Casserly, 1984B).

TABLE 1

Demographic Data

Number & per cent of Occupational Therapists (N=1366) and Female Professional/Managerial (N=1000) National Sample

	Female Professional/Managerial	Occupational Therapists
Age/Mean	34 Years	35 Years
Median	32 Years	35 Years
Marital Status		
Never Married	390 (39%)	328 (24%)
Now Married	450 (45%)	864 (64%)
No Longer Married	150 (15%)	150 (11%)
Missing Data	10 (1%)	14 (1%)
Income		
Mean/Median	$30,000-39,000	$30,000-39,000
Number of Years of Education		
9-11 Years	40 (4%)	-
12-13 Years	170 (17%)	14 (1%)
14-16 Years	470 (47%)	560 (41%)
17+ Years	320 (32%)	792 (58%)
Mean/Median	14-16 Years	17+ Years
Immigrant to Canada	140 (14%)	301 (22%)
Native Person	70 (7%)	14 (1%)
Province		
Newfoundland	10 (1%)	14 (1%)
Nova Scotia	30 (3%)	41 (3%)
Prince Edward Island	10 (1%)	14 (1%)
New Brunswick	20 (2%)	14 (1%)
Quebec	100 (10%)	301 (22%)
Ontario	310 (31%)	533 (39%)
Manitoba	30 (3%)	82 (6%)
Saskatchewan	40 (4%)	41 (3%)
Alberta	380 (38%)	96 (7%)
British Columbia	60 (6%)	230 (17%)
Northwest Territories	0	2 (0.15%)
Yukon Territories	0	0

Analysis

The principal technique employed in analyzing the data was discriminant analysis. This technique makes it possible to determine a linear combination of variables that can be used to discriminate between occupational therapists and the female professional/managerial sample.

The group centroids (average group score on the discriminant function) and the canonical variate correlations (the correlation of each individual variable to the discriminant function) will be presented. The magnitude of the correlation indicates how important a variable is in discriminating between the groups. The larger the correlation, the more important it is for discriminating between the two groups. Taken together, these statistics give a measure of how well the groups are discriminated and of the substantive nature of the differences between the two groups.

Results

Value Scales

Table 2 shows means, standard deviations, and univariate F-ratios for all twenty variables of the LRI-VS for the female professional/managerial sample and the occupational therapist sample. Most of the univariate F-tests are significant at $p < 0.01$. Only the F-tests for Personal Development, Variety, and Cultural Identity are not significant at this level.

One significant discriminant function was generated with a canonical correlation of 0.48, indicating that there are significant differences between the two samples. The location of the two groups on the discriminant function gives some idea as to the amount and direction of separation between the groups. The group centroids scores of -0.64 for the professional/managerial group and 0.47 for the occupational therapists indicate that they are well discriminated by the discriminant function.

Bearing the group centroids in mind, the canonical variate correlations can be examined to see if any substantive interpretation of the discriminant functions can be given. Table 3 presents the canonical variate correlations for the twenty scales of the LRI-VS.

TABLE 2

Means, standard deviations and univariate F-ratios for Female Professionals and Occupational Therapists Life Roles Inventory - Value Scales

Value	Female Professional Sample (n=1000)		Occupational Therapists Sample (n=1366)		F
	Mean	S.D.	Mean	S.D.	(1,2348)
Ability Utilization	3.5	0.4	3.4	0.4	11.58*
Achievement	3.5	0.4	3.3	0.4	48.94*
Advancement	3.0	0.6	2.7	0.6	201.70*
Aesthetics	2.8	0.7	2.6	0.7	35.52*
Altruism	3.2	0.6	3.3	0.5	22.48*
Authority	2.9	0.6	2.8	0.6	15.52*
Autonomy	3.3	0.5	3.3	0.5	9.50**
Creativity	3.0	0.6	3.2	0.6	48.14*
Economics	3.2	0.6	3.0	0.6	74.91*
Life Style	2.9	0.5	3.0	0.5	14.97*
Personal Development	3.6	0.3	3.6	0.3	0.97
Physical Activity	2.8	0.7	2.8	0.6	7.86**
Prestige	3.2	0.5	3.1	0.6	11.44*
Risk	2.0	0.7	1.8	0.6	53.66*
Social Interaction	2.8	0.6	2.9	0.5	55.60*
Social Relations	3.3	0.5	3.4	0.5	28.88*
Variety	2.8	0.6	2.9	0.6	5.76
Working Conditions	2.9	0.6	2.8	0.6	38.54*
Cultural Identity	2.7	0.6	2.6	0.6	5.98
Physical Prowess	1.5	0.5	1.6	0.6	15.36*

* = $p < .001$
** = $p < .01$

TABLE 3

Canonical Discriminant Functions and Discriminating Variables in Order of Magnitude

Advancement	-0.530
Economics	-0.323
Social Interaction	0.278
Risk	-0.273
Achievement	-0.261
Creativity	0.259
Working Conditions	-0.231
Aesthetics	-0.222
Social Relations	0.200
Altruism	0.177
Authority	-0.147
Physical Prowess	0.146
Life Style	0.144
Ability Utilization	-0.127
Prestige	-0.126
Authority	0.115
Physical Activity	0.104
Cultural Identity	-0.091
Variety	0.089
Personal Development	-0.036

Discriminant Functions:	Group Centroids
Occupational Therapists	0.47
Other Female Professionals	-0.64

Inspection of the canonical variate correlations indicates that Advancement, Economics, Social Interaction, Risk, Achievement, and Creativity have the highest correlations with the discriminant function. The discriminant function is a dimension that represents differences that are best defined by Social Interaction and Creativity at the positive end of the dimension and by Advancement, Economics, Risk, and Achievement at the negative end. The centroid values for the professional/managerial sample indicate that they consider Advancement, Economics, Risk, and Achievement more important than do occupational therapists. On the other hand, the occupational therapist consider Social Interaction and Creativity more important than do the female professional/managerial sample.

Salience Scales

Table 4 shows means, standard deviations, and univariate F-ratios for Participation, Commitment and Role Values for each of the Roles of Studying, Working, Community Service, Home and Family, and Leisure. The univariate F-tests for Participation - Studying, Commitment - Studying, Commitment - Work, Role Values - Studying, and Role Values - Work are all significant at the 0.001 level.

TABLE 4

Means, standard deviations and univariate F-ratios for Female Professionals and Occupational Theapists Life Roles Inventory - Salience Scales

Value	Occupational Therapists Sample (n=1366) Mean	S.D.	Female Professional Sample (n=1000) Mean	S.D.	F (1,2323)
PARTICIPATION					
Studying	2.5	0.7	2.6	0.8	29.61*
Working	3.0	0.6	3.0	0.6	2.44
Community Service	1.9	0.7	1.9	0.8	0.55
Home and Family	2.7	0.7	2.8	0.7	1.96
Leisure Activities	2.7	0.6	2.7	0.7	1.02
COMMITMENT					
Studying	2.7	0.7	2.8	0.8	25.66*
Working	3.3	0.5	3.5	0.6	54.38*
Community Service	2.3	0.8	2.3	0.9	0.53
Home and Family	3.4	0.7	3.4	0.8	2.35
Leisure Activities	2.9	0.6	2.8	0.7	4.31
ROLE VALUES					
Studying	2.5	0.7	2.6	0.8	38.24*
Working	3.1	0.5	3.2	0.6	21.38*
Community Service	2.3	0.7	2.2	0.9	2.44
Home and Family	3.2	0.6	3.2	0.7	5.09
Leisure Activities	2.9	0.6	2.8	0.7	2.20

* = $p < .001$

One significant discriminant function was generated with a canonical correlation of 0.29. The group centroid scores for the female professional/managerial sample was 0.35 and for the occupational therapist sample it was -0.26. Bearing these in mind and by considering the canonical variate correlations in Table 5 the substantive nature of the discriminant function dimension and of the differences between the two groups can be ascertained. Inspection of the canonical variate correlations indicates that the most important variable for discriminating between the two groups is Commitment to work. The three measures of the studying role are also important as to Role Values - Work. The centroid values for the female professional/managerial sample indicate that they find the five above-mentioned variables more important than the occupational therapy sample.

TABLE 5

Salience Scales

Canonical Discriminant Functions and Discriminating Variables in Order of Magniture

Commitment - Work	0.507
Role Values - Studying	0.425
Participation - Studying	0.374
Commitment - Studying	0.348
Role Values - Work	0.318
Role Values - Home	0.155
Commitment - Leisure	-0.143
Participation - Work	-0.107
Role Values - Community	-0.107
Commitment - Home	0.105
Role Values - Leisure	-0.102
Participation - Home	0.096
Participation - Leisure	-0.069
Participation - Community	-0.051
Commitment - Community	0.050

Discriminant Functions:	Group Centroids
Occupational Therapists	-0.257
Other Female Professionals	0.355

Discussion

The similarity between the LRI data collected from the national and provincial studies of occupational therapists is striking. It is likely that this level of high endorsement for patient-oriented values is also common amongst female allied health professionals.

However, it is significantly different from the values endorsed by other women in the professional/managerial category in the normative sample from the LRI.

Differences between the two groups in terms of values were best defined by advancement, economics, risk, achievement and working conditions which were more important to other professional women while social interaction and creativity were more highly endorsed by the occupational therapy respondents.

It cannot be said that the values endorsed by those outside the occupational therapy subgroup are unimportant to therapists, but it is very evident that they are of lesser importance to therapists and, therefore, likely to receive considerably less emphasis in any career planning activity that therapists undertake. The level of commitment and role value scale endorsement by non-occupational therapists indicates that they are more likely to place a higher priority on career related issues, ie. studying and working.

Home and family issues on the other hand would appear to be of greater importance to the occupational therapy subgroup; this is also the group with the higher proportion of married individuals. Within the occupational therapy respondent pool, 164 (12%) indicated that they were not practicing or had left the field at the time they were surveyed, which could be perceived as additional support for the importance that these individuals place upon this rule. This will be discussed further in relation to the interrupted career pattern.

Therapists also value autonomy and achievement highly, while advancement and risk receive considerably lower ratings. Autonomy in work related decision making could be expected to involve risk-taking, and achievement related to subsequent career advancement. Perhaps the high value placed upon the process of helping others and being concerned about their welfare assumes such priority for therapists that other values are overshadowed by the desire to help.

The interrupted career pattern, which is so common in occupational therapy (and likely in other female-dominated allied health professions as well) frequently results from the demands of yet another nurturing role, that of raising a family. Perhaps without realizing it, therapists who choose to interrupt the career option are indeed taking a major risk which is obscured from view by their search for an outlet of altruism and nurturance.

While therapists are more likely to act as advocates for their patients on the basis of the values they endorse, other female professionals, the non-occupational therapists, appear more likely to act as advocates for their own career development. By endorsing advancement, economics, risk, achievement and working conditions more highly, such women are more likely to be competitive and would consciously seek opportunities for their own career advancement.

Conclusions

Occupational therapists in this study endorsed values which appeared to be consistent with the patient-oriented elements identified by Sabari (1985) and demanded in professional practice. Women in other professional categories (outside allied health) demonstrated a more career-oriented pattern that is likely to be part of their conscious career planning strategies. When the level of endorsement of career related activity, ie. studying and working, was compared on the salience scales, those outside occupational therapy demonstrated higher levels of commitment and role value to these activities.

It is of interest to note that a similarity exists in the pattern of values endorsed by occupational therapists and other females in the professional/managerial category regarding personal development and ability utilization. Both are considered to be very important. It may well be that these are of greater importance to all individuals who possess post-secondary education, the social desirability factor being a powerful influence on all respondents.

Values are the best discriminators between the two groups and this finding has implications for career selection and vocational counselling. In a field where occupational interests have played a primary role in the development of assessment procedures, greater attention should be paid to values and the powerful role these elements are likely to play in career selection.

The team approach to patient management is a cornerstone in rehabilitation, and communication difficulties do arise between different levels of personnel. Increasingly, management personnel are being recruited from the universities' business schools where the values endorsed by MBA graduates are likely similar to respondents in the professional/managerial category. Occupational therapists and others who endorse a patient-oriented approach may well face communication problems with managerial staff that are value-based. The intrinsic elements of the job appear to be more important to occupational therapists, while the values endorsed by respondents in the professional/managerial group appear to be more egocentric in nature and they tend to reflect more of the extrinsic elements of the job.

If this orientation is typical of those in managerial positions who are outside the occupational therapy profession, it is likely that the more intrinsic concerns of occupational therapists may not receive the priority in patient care that therapists think they should be given. Although management and staff could all endorse quality assurance programs, therapists may do so more from a patient-oriented value base while management could be expected to endorse such programs to maintain accreditation, secure funding and avoid expensive legal action. What therapists must learn to deal with effectively is endorsement of a common goal but from a different value orientation.

If occupational therapy students enter their enducational experience strongly endorsing patient-oriented values and the educational experience continues to stress and reinforce these aspects of patient care, the practice will likely be detrimental to the development of leaders and managers in this field. Those with leadership aspirations will gravitate to other fields where their endorsement of such values as advancement, achievement and autonomy is more acceptable. This will compound the current manpower shortage in this area of rehabilitation; greater opportunity for career advancement within occupational therapy will help maintain senior personnel in the field. Educational programs in occupational therapy would do well to review their curricula and practices in terms of the values they reinforce, while workshops on value clarification may help to increase understanding and enhance communication in rehabilitation teams.

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THE USE OF RELAXATION AND IMAGERY WITH RHEUMATOID ARTHRITIS

David Prendergast and Keith Wood

ABSTRACT

Twenty-two persons with either "classical" or "definite" rheumatoid arthritis participated in a study designed to determine the effects on medical symptoms of a 6 week relaxation and imagery program. Subjects were randomly assigned to either an experimental or control group. A pre-post evaluation included; 1) clinical measures of erythrocyte sedimentation rate, grip strength, range of mobility in worst involved joint, number of effusions, walking time, and active joint count, 2) the State-Trait Anxiety Scale, 3) the Multidimensional Health Locus of Control Scales, and 4) a Value of Health Questionnaire. In addition, subjects recorded daily, their self-evaluation of pain. All subjects met with experimenter once per week: those in the experimental group for training in relaxation and imagery; those in the control group to discuss daily ratings of pain. The results revealed no significant difference between groups on medical change scores nor on questionnaire change scores.

THE USE OF RELAXATION AND IMAGERY WITH RHEUMATOID ARTHRITIS

One of the major chronic illnesses of modern society is rheumatoid arthritis (RA). The prevalence of RA, based on limited population surveys in Europe and North America, is in the range of one to three percent (Beeson & McDermott, 1975; Jayson & Dixon, 1974; Pelletier, 1977). Fortunately, most of these people are only mildly affected.

The cause or causes of RA are yet unknown, although several theories are currently receiving attention (Jayson & Dixon, 1974; Zvaifler, 1979). An important factor recognized but not well understood in the development and progression of RA is that of stress (Pelletier, 1977). According to Pelletier (1977), stress, as defined by Selye (1956), has been demonstrated to correlate positively with arthritic attacks in those cases where a complete disease history has been available. In addition, personality and behavioural studies have provided further support for the conclusion that RA and emotional stress are related (Bayles, 1972; Denver, Grove, Leblond, & Latulippe, 1979; Hoffman, 1974; Short, Bauer, & Raynold, 1957; Toyama, Popell, Evans, & Heyder, 1980). This relationship is so evident that RA is considered to be one of the major afflictions of modern civilization -- cardiovascular disease, cancer, and respiratory disease being the other three.

In the area of cancer research, the Simontons (1975; 1978) developed a 6 week treatment program for cancer patients designed to affect patients' attitudes toward living, and toward their cancer. First, the Simontons describe to patients how certain reactions to stressful situations can influence the body's immune reaction and endocrine system. It is hoped that this will help individuals to become more aware of the role they play in their own disease process. Secondly, the patients are taught relaxation and the use of imagery. The Simontons feel that relaxation and mental imagery are excellent tools for creating and reinforcing patients' beliefs in their ability to recover from cancer. The relaxation technique is designed to break the cycle of tension and fear so common among cancer patients. In addition, many patients discover that their psychological perspectives change when they are able to relax, permitting them to cope more effectively with their lives and their disease. Moreover, by engaging in mental imagery, patients are able to create positive changes in their expectations, giving them a major role in their own treatment and in assuming some responsibility for their recovery. The Simontons suggest their methods may be employed no matter what the illness, since they consider any illness, including arthritis, to be a signal of a lack of unity between mind and body (Simonton, Matthews-Simonton, & Creighton, 1978).

The present study was designed to apply relaxation and imagery techniques, as applied in the treatment of cancer (Simonton, & Simonton, 1975; Simonton et al., 1978), to the treatment of RA. It was hypothesized that the use of relaxation and imagery would significantly reduce medical symptoms associated with RA. Moreover, in an attempt to understand the attitudes and beliefs of RA patients toward their health, as well as possible changes that may occur as a result of treatment, the following questionnaires were administered: 1) the Multidimensional Health Locus of Control (MHLC), 2) the State-Trait Anxiety Inventory (STAI), 3) a pain rating inventory, and 4) a Value of Health Questionnaire.

The MHLC (Wallston, Wallston, Kaplan, & Maides, 1976; Wallston, Wallston, & DeVellis, 1978) measures individual health locus of control beliefs as primarily:

internal (IHLC), i.e., one stays or becomes healthy or sick as a result of one's own behaviour; a matter of chance (CHLC), i.e., luck, chance or fate determine illness or health; or under the control of powerful others (PHLC), i.e., health care professionals, family, etc. The primary use of the MHLC in the present study was to assess any possible differences in perceived control between experimental and control groups due to treatment.

Concerning the STAI (Spielberger, Gorsuch, & Lushene, 1970), it was hypothesized that the State-Anxiety Scale scores would decrease over time due to treatment. According to Spielberger et al. (1970), state anxiety is characterized by consciously perceived feelings of tension and heightened autonomic nervous system activity, both of which are reduced by relaxation training. On the other hand, it was hypothesized that trait anxiety would not change significantly, since trait anxiety refers to a relatively stable individual difference in anxiety proneness (Spielberger et al., 1970).

It was also hypothesized that the use of relaxation and imagery would significantly reduce the self-reported pain ratings of the experimental group regardless of changes in medical measures, since psychological approaches to pain relief, i.e., relaxation therapy, are able to produce some measure of relief (Melzack, 1977).

Finally, a measure of health value (Knutson, 1981), a 7-point scale rating the importance of health in the past few years, was included. A significant difference between groups on this measure would have to be taken into consideration in explaining differences between the groups on the medical, State-Trait, and MHLC change scores (Wallston, Wallston, Kaplan, & Maides, 1976; Wallston, Wallston, & DeVellis, 1978).

Method

Participants

Approximately 100 RA patients were assessed in order to obtain 22 participants, who were randomly assigned, using the alternate method, to either an experimental (N=10) or control (N=12) group. Unequal N's were due to the removal of the data of one experimental male participant, since it was discovered he had been admitted to the program in error, not having met three of the four criteria, and one experimental female participant who dropped out after one session. The average age of the participants was 53.1, with a standard deviation of 11.25 years.

Although most participants were using prescription medication to combat pain, swelling and inflammation, there was a definite attempt to keep other forms of medical therapy, i.e., gold and cortisone, (Townes & Stevens, 1968) constant during their involvement in the study.

All participants met the American Rheumatism Association criteria for classic or definite rheumatoid arthritis (Rodnan, 1973). Moreover, 3 of the following 4 criteria for active disease were met by each participant: 1) 30-45 minutes of morning stiffness, 2) 15 painful joints, 3) 7 swollen joints, 4) erythrocyte sedimentation rate (ESR) of 28mm. Thus, sufficient inflammatory activity was present in each participant at the onset to allow possible observation of improvement in disease activity following 6 weeks' involvement in the study.

Procedure

Each participant was given a medical examination plus the MHLC, the STAI, and a Value of Health Questionnaire. The medical evaluation included measures of: 1) erythrocyte sedimentation rate, 2) right and left hand grip strength, 3) range of mobility (extension and flexion) in worst involved joint, 4) 50-foot walking time, 5) number of effusions, and 6) active joint count. Also, each participant was given a pain-rating form to record daily pain rating for 6 weeks. After a 6 week interval all participants were again given the medical evaluation followed by the questionnaires, in the same order each time. A double blind procedure was used throughout. In the 6 week interval, experimental participants participated in a relaxation and imagery program, while control participants met with the experimenter to discuss pain ratings. This weekly meeting with control participants was an attempt to control for the variable of "attention", since experimental participants were meeting with the experimenter once per week. Following the conclusion of the study, all participants were offered a debriefing session.

Results and Discussion

The primary hypothesis that relaxation and imagery would significantly alter medical measures of RA, tested by between-group t-tests and discriminant analysis, was not supported. Neither analysis revealed differences between the experimental and control group on medical measures. Moreover, on only one measure, extension, did the experimental group improve while the participants in the control group worsened. Furthermore, on measures of walking-time and erythrocyte sedimentation rate, both groups showed a worsening of symptoms, while on the five remaining measures, right and left hand grip strength, flexion, number of effusions, and number of active joints, the control group showed more improvement than the experimental group. Therefore, the non-existence of the hypothesized significant differences strongly suggests that the use of relaxation and imagery with RA is not an effective treatment over a 6 week period. However, this lack of significant differences between the experimental and the control group could possible have been due to the length of the treatment program. Although research (Rothermich, Philips, Waldemar, & Thomas, 1976) on treatment which affects the immune system, i.e., gold, has demonstrated treatment effects within 5 to 8 weeks, it is possible that more time is required for relaxation and imagery to have a similar significant effect. A further consideration in determining the validity of the results is that, although an attempt was made to control the use of medical therapies such as gold and cortisone, it was necessary in some instances, for the well-being of the patient, for such treatments to be applied during involvement in the study.

Regarding the MHLC questionnaire, the experimental and control groups did not differ significantly on the internal, chance and powerful others scales, due to treatment, indicating that involvement in the relaxation and imagery program did not alter locus of control beliefs significantly. In retrospect, however, it is possible that unless participants changed significantly on the medical measures, which was not the case in this study, then change in locus of control was unlikely.

The hypothesis that relaxation and imagery would significantly reduce state anxiety as measured by the STAI, was also not supported. One probable explanation could be that although the RA patients learned to relax, it is possible they respond to statements on the State-Anxiety Scale in terms of their illnesses, i.e., pain and discomfort and not simply in terms of situational state anxiety. If this were the case, participants' scores on the State-Anxiety Scale would not be expected to decrease significantly, since, for the most part, the medical condition of these participants did not improve.

The hypothesis that relaxation and imagery would significantly reduce pain ratings, tested using between-group t-tests, was not supported. It is highly probable that any benefits obtained from a psychological approach to pain with RA is simply not enough to compensate for the large physiological basis of pain associated with this disease.

The analysis looking at pre-post changes, irrespective of group, found significant improvement on only two of the medical measures, flexion, $t = 3.77$, $p < .001$, and active joint count, $t = 3.77$, $p < .001$. Also there was significant decrease on internal locus of control and a significant increase on chance, indicating that, overall, participants weakened in their belief in personal control over their illness and strengthened their belief in chance factors. Given the lack of improvement in terms of overall recovery from disease following 6 weeks of treatments, it may not be surprising that participants decreased in their feelings of personal control.

In conclusion, the hypothesis that the use of relaxation and imagery with RA would significantly reduce medical symptoms was not supported by the present study. This result lends no support to the Simontons' suggestions that their procedures, developed for use with cancer patients, may also be effective with arthritis patients. However, it is possible that in order to be beneficial, relaxation and imagery need to be embedded within an atmosphere of more positive expectations, as was done with the Simontons' cancer patients. Issues raised by Norman Cousins (1976) would strongly support such a position. Apart from encouraging positive visualizations, the current study made no attempt to influence patients' attitudes toward their illness, as this would have represented a confounding variable with relaxation and imagery, had improvements in medical symptoms been found. Finally, the results of this study should not necessarily be seen as negating the consideration of using relaxation and imagery in the reduction of anxiety with cancer and RA patients. Although the anxiety measure used in this study did not change from pre to post, other studies have demonstrated the effectiveness of such treatment in reducing anxiety in cancer patients (Lyles, Burish, Krozely, & Oldham, 1982). Thus, results concerning the usefulness of relaxation and imagery for anxiety reduction remain equivocal at this point in time.

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THE NEED FOR A BROAD AND FUNCTIONAL DEFINITION OF EMPLOYABILITY

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ABSTRACT

It is the duty of the Court, even where the injured plaintiff has never been employed, to assess such sum for loss of future income as may be determined from a reasonable appraisal of all the evidence. The allowance of an amount for loss of future income in an injured child is extremely difficult. Since the Court is bound not to act on mere speculation, what evidence should be brought before the Court for its consideration? The author suggests that this evidence may be similar to that required in determining potential for employment, and therefore eligibility for vocational rehabilitation. Drawing on professional experiences and those in the Courts, the author argues that employability needs to be operationally defined, using a functional approach, in a way that allows an assessment of what specifically it designates. New developments, such as reasonable accommodations in the work place and the Charter of Rights and Freedoms, is examined as they may pertain to employability assessment and vocational rehabilitation research in the years ahead.

THE NEED FOR A BROAD AND FUNCTIONAL DEFINITION OF EMPLOYABILITY

Introduction

"In a fluid, industrial society, occupation is the principal determinant of social status". (Super, 1957, p. 362) So argued one of this century's greatest students of **GREATEST STUDENTS OF** career pattern studies, vocational development theory, and the world of work. Work plays a central role in modern society and is the principal determinant of social status. Gainful work is not merely a means of earning a livelihood. It is also a way of life.

De Jong's (1981) concept of productivity attempted to address the overall contribution of an individual to community and family life. In so doing, he studied productivity along five different dimensions by evaluating a person's participation in gainful employment, homemaking, school or educational programs, formal organizations, and leisure time activities. While productivity of people means more than work, Canadian cultural values still place work in a pivotal and central role.

A job is the benchmark of a productive, contributing member of Canadian society. It enables an individual to purchase material goods such as a house, a summer home, and a car which are often used to gauge success. Moreover, a job also contributes to an individual's sense of self worth.

Any person raised to this milieu will be subject to the influences of Canada's value system for work and productivity. Thus, people with disabilities seek to work as a means of earning a livelihood and as a way of life, just as other citizens do.

Much has been written about the problems faced by Canadians in achieving gainful employment. While there are difficulties associated with achieving this goal, the one I wish to focus on is the narrowness of the concept of employability as it is applied to disabled individuals.

Employability

Employability and employable are terms readily used by Canadian citizens and by rehabilitation professionals alike. Simply put, employable means able to be used. Defining employability is more complex. Generally, it depends on three factors - the availability of employment, the availability of a person for employment, and the possession by that person of skills and competences to meet the employment requirements.

Complicating this rather simple conceptualization of employability is the fact that several other factors are likely to be present as well. Among these are:

- stereotyped or prejudiced expectations which may affect recruitment or selection,
- educational achievement and trade curricula which may be favoured by an employer even though neither may be relevant to meeting employment requirements,
- contacts which are a major means of getting jobs, finding out where jobs are, and introducing seekers to persons who employ workers,
- adequate vocational guidance which is related to getting a job and particularly to obtaining a satisfactory job.

The employability of disabled persons involves the three general factors, any or all of the other factors presented, as well as several additional factors which may be present. These are related to the needs for:

- accessibility to and useability of facilities within the entire work place,
- adjustments by the employer within the job environment constituting reasonable accommodation,
- functional aids in mobility or to enhance capabilities in the job,
- accessible, usable, and affordable transportation to and from work,
- personal assistance services available and affordable in the work setting and in the community at large.

While there are unique employability factors faced by disabled individuals, the process of achieving employment is more similar to than different from that which must be undergone by Canadians in general.

Vocational Rehabilitation

Any discussion of the employability of disabled individuals must also address vocational rehabilitation. Vocational rehabilitation is the provision of those goods and services which are needed by disabled individuals to achieve gainful employment. It includes the determination of a disabled person's potential to become gainfully employed and to sustain activities in the work force.

In determining this potential, professionals have relied almost exclusively on the clinical approach to the assessment of disabled persons. This has focussed on four premises:

- that a disabled individual, i.e., the client, has the problem,
- that the problem is the disability,
- that the disability produces the employment handicap, and
- that vocational rehabilitation services may reasonably be expected to benefit the disabled individual in terms of employment.

As with all programs of limited funds, federal and provincial vocational rehabilitation programs must direct the available money where it will do the most good. As dollars become scarcer, this becomes harder and harder to do. The potential for functioning in the work place of candidates for employment-related services is likely to be a major consideration in decisions made. Thus, the assessment of employability becomes a critical factor in determining how disabled persons will lead their lives. Because of the significant effect that the determination of employability will have on the lives of disabled persons, we must be as clear as possible about what is meant by employability and the circumstances under which one is employable.

Assessing Employability

In determining a person's employability, whether it be for vocational guidance in schools or for gainful employment in society at large, much of our focus has been on the personal characteristics of an individual - those that are possessed and those thought to have potential for acquisition. Education, work experience, literacy, intelligence, motivation, health, vocational goals, and self-image are all examples of personal characteristics often used to determine employability of individuals.

The Clinical Model of Employability

When it comes to the disabled population, employability is conceptualized in the same way but with the added measure of loss or diminution in mental and/or physical functioning. In large part, the dominant heritage from the overall rehabilitation movement was the clinical model of employability.

The clinical model of employability rests on the presumption that a disabled person is unemployable because of a deficit. Thus most, if not all, rehabilitation efforts, medical and vocational, become focussed on altering the disabled person. As well, the cornerstone of compensating insured citizens, disabled veterans, and injured workers inevitably becomes based on percentages of losses in human functioning and of body parts.

Occupations are classified according to the physical demands of a given job. The key to employing disabled individuals came to be seen as matching the physical capabilities with those required in a job. Thus, jobs are listed according to whether or not their duties can be performed by a deaf person, a blind person, a retarded person, and so on. This has led to the stereotyping of jobs which are suited to a particular physical or mental disability without regard to factual job qualifications and without regard to the qualifications, skills, and interests of disabled individuals.

Medical information became a requirement on job application forms so that employers could gain knowledge about any emotional, mental or physical limitations of job applicants. Employability (and pensionability) was determined largely by medical information and opinions, as more and more employers set up medical departments to screen job applicants.

New Trends Influencing Employability

Three major events have had an influence on rehabilitation workers and other people interested in employability. Some people with severe physical disabilities began to achieve employment when most assessments would have indicated otherwise.

Disabled and non-disabled citizens began to speak out more and more about the impact on their lives of environmental factors, including public attitudes. There is a growing public debate about the extent to which society at large should be responsible for removing environmental constraints - barriers in transportation, inaccessible public buildings such as employment offices and schools, unmet personal care needs, and so on.

Rehabilitation workers often joined in deploring architectural barriers, segregated schools, lack of services and other social problems. A few joined community groups and brought about significant changes. But rehabilitation efforts today continue to focus on altering the disabled individuals to fit the community demands.

The Courts and Employability

During the past five years, experiences in Canadian Courts began to influence my framework for considering employability. I began to wonder about two things:

- whether or not the evidence brought to the Courts bore any resemblance to the factors considered by rehabilitation professionals in determining employability and therefore vocational rehabilitation potential, and
- whether there was anything in the Court's process of justice that could lead rehabilitation professionals to an improved concept of employability.

Since early times, the Courts have tried to compensate personal injury victims who can establish fault. In order to do this, they have attempted to estimate the lump sum which will put the party who has been injured in the same position as he would have been had he not sustained the injury.

Courts award compensation under common law in accident cases involving negligence. General Damages are those which are presumed to flow from an accident or injury. General Damages means simply that jury or judge has wide discretion in assessing them and they may be assessed not with reference to any limited period, but with reference to an infinite future.

While Courts may also award compensation for Special Damages, for the purposes of this article it is General Damages which are germane. General Damages cover damages in three areas: prospective loss of earnings or profit; cost of future care and other related expenses; and pain, suffering and loss of amenities of life. These areas then are three of the ingredients that make up a lump sum award by the Courts. While there is overlap between loss of earnings and future care costs, the ingredient most related to employability is the prospective loss of earnings or profit.

The assessment of damages for loss of earning capacity or potential profit is onerous, even when an established work history is present. It involves the loss of human opportunity and hope, particularly in student victims and infants, as well as loss of income.

How does one fix an amount for loss of future income in an injured two-year-old child? Can there be any evidence whatsoever which will assist the Court in determining whether an infant ever would have become a member of the work force? Can there be any evidence upon which the Court may assess whether a child would have had a successful business future or been a failure? Regardless of the age of the injured party, the Court is bound not to act on mere speculation. What kinds of evidence have been brought before the Court for its consideration, in cases of this type?

In trying to answer this question, I undertook a review of reported personal injury compensation for those individuals whose cases came before the Courts after 1970 (Reardon, 1971-1985). My research was limited to discovering which criteria had been presented to the Courts, and which of these criteria carried the most weight in persuading the Courts to the decisions made. I also wanted to investigate whether these criteria were similar to factors of employability most utilized by rehabilitation professionals.

In the early 1970's, relatively weak information guided the Courts in their assessment of loss of future earnings. Examples of this information in infants and students were yardsticks based on the father's income and position (Taylor v. Bristol Omnibus, 1975), an assumed base income of the working population (Thornton et al. v. Board of School Trustees, 1976), and a working mother's current wages (Arnold v. Teno, 1974). With respect to the latter, the Supreme Court (Arnold v. Teno, 1978) disagreed with this yardstick and chose the median point between the poverty level in 1978 and the working mother's current wages. In a later situation involving brain injuries at birth (Wipfli v. Britten, 1978), the Court rejected benchmarks of the father's gross annual income and the alleged average Canadian male's income, in favour of a lower award for the infant.

Regardless of the benchmarks used for infants, they are no more than crude attempts to measure the scope of human potential in dollars and cents. But, however, crude, they are attempts to place dollar values on human faculties and human happiness.

What then was the evidence presented to the Courts for adult plaintiffs who had established school and work histories? The evidence presented involved all the expected personal characteristics. Information such as academic records, employment histories, income tax reports, intelligence, medical health, percentages of disability opinions, and so on appeared throughout my review. References were made to the loss of a leg being $60,000.00 as compared to loss of an eye being $35,000.00 (Conkin v. Smith, 1978). Always the tariff method was introduced when conceptualizing what the loss of body part was worth. This method of assessing damages by the Courts clearly resembles the clinical method of appraising employability. The deficit, that is the loss of the body part, is viewed as a principal cause of loss of future income.

The similarity between the Courts' and rehabilitation professionals' assessment criteria of employability is not surprising. The Courts do, after all, hear expert testimony introduced by legal counsel. And legal counsel tends to seek expert opinions from rehabilitation professionals - often the same ones who are making or affecting the vocational rehabilitation decisions about disabled peoples' employability.

However, although employability criteria are similar, the Courts have made at least two major advances which have contributed to the achievement of a desirable approach to employability assessment.[1]

Major Contributions from the Courts

A Public Approach to Damage Assessment and Accountability

According to Cherniak and Sanderson (1981), the techniques used to achieve an assessment of damages have changed radically since the 1970's. In the so-called "trilogy" of cases in 1978[2], one of the major issues to be decided by the Supreme Court of Canada was the proper approach to be taken by the Courts in the assessment of damages. The old conventional or global approach was to arrive at a lump sum award without knowing the basis for the amount, although occasionally the ingredients of the award were mentioned.

The Supreme Court of Canada rejected this old conventional approach in favour of giving a detailed explanation as to how an award was determined. Through this detail one could now review all relevant factors considered by the Court as well as the ingredients which made up the total award. Thus through the Courts, citizens may discover the sum assessed for each ingredient, such as loss of future income, considered in the total award. As well though, we may discover what evidence was brought before the Courts for each ingredient, and the weight assigned to the evidence by the Courts in the decision-making process.

As a result, plaintiffs and defendants alike, armed with the same detailed knowledge and information as the decision-makers, are able to challenge any error in the assessments. Also important is the fact that students of social justice are able to compare and contrast the bases for the assessments which have persuaded the Courts to reach their decisions.

A Broad Approach to the Scope of Potential Human Functioning

Earlier in this article, mention was made of another ingredient in damage assessment by the Courts, namely cost of future care. Had my review of the Court experience been confined only to loss of future income, I would have overlooked the important contribution made by the Courts regarding the future care ingredient.

In the "trilogy", the Supreme Court of Canada made it clear that a damage award must adequately provide severely injured plaintiffs with a reasonable standard of care for the remainder of their lives. Where the evidence supports care at home and in the community at large, the plaintiff is not to be forced to accept institutional care because it is cheaper.

Where it is felt to be reasonable, every effort is made to enable an injured plaintiff to participate in a broad range of community activities and community life. Factors such as transportation, education, personal supplies, etc., are now all considered over life expectancy, quite apart from the issue of employability and loss of future income or profit.

Thus, in disability-related future care planning, payment of even extraordinary costs associated with implementing the plan is viewed as essential to community life participation, whether or not employment is anticipated in the future. As can be seen from a review of future care factors considered by the Courts, environmental factors such as inaccessible transportation are viewed as disability-related. Reasonable alternatives to public systems such as cars or vans are accepted, including the probable frequency of future vehicle replacement.

To the degree that elements of future care are considered and can be compensated by dollars, victims of accidents involving negligence clearly have environmental obstacles to community living considered as disability-related expenses. These are now recognized by the Courts as an essential part in computing the eventual lump sum award.

In this situation then, the Courts are in advance of society as a whole, in accepting responsibility for environmental barriers such as inaccessible public transportation. Through increasingly larger and larger damage awards, society is paying for its environmental barriers to full participation by disabled people. As these awards are publicized, and insurance premiums inevitably rise, one has to wonder when society will realize that it is responsible for removing these environmental constraints. Clearly, the associated publicity will add immeasurably to the public debate on the extent to which society at large ought to be responsible.

The Challenges Ahead

Towards Improved Accountability

In the clinical model of rehabilitation, with its incumbent system of confidential patient and client records, rehabilitation professionals are not so immediately accountable for their opinions offered as they are appearing as expert witnesses in the Courts.

Rehabilitation professionals and their clients should seek to learn from one another, and to work together in challenging errors or omissions in assessments and opinions. While program evaluation, applied research, and quality assurance activities offer increased hope for feedback and accountability, the Court's open and participatory system of justice is worthy of emulation. So is its relatively immediate system of feedback and challenge.

Towards A Broad Approach to Employability

The clinical model of employability is too limited and confining. Resting on the presumption that a disabled individual is unemployed because of a personal deficit, environmental factors are given scant consideration.

In determining employability outcomes with disabled people, environmental factors and variables are as critical to consider as personal characteristics. I do not mean, however, determining that because someone cannot use public transportation, he or she can only engage in home-bound employment. Rather, the environmental obstacle of inaccessible transportation should become the focus of alteration, not the alteration of the disabled person so that he or she can fit into the inaccessible environment.

Rehabilitation research into employability outcomes can and must provide solid evidence about the impact of both environmental factors and personal characteristics. For far too long rehabilitation professionals have tended to accept the environmental status quo and have focussed on the disabled person as owning the problem. By engaging in research of this narrow scope, we have all but ignored the significant part played by the environment. Worse still, by this neglect, we have not accepted responsibility for contributing to the public debate in a way that will show empirically the cost to society of our environmental barriers to full participation by disabled individuals.

Towards a Common Definition of Employability

In researching the literature, I could find neither a common description of employability nor an accepted list of its component factors or ingredients. Until we know and can agree upon the environmental factors and personal characteristics that are relevant to the employability of disabled individuals, we are left merely to speculate about their impacts.

Employability needs to be operationally defined in a way that allows an assessment of what specifically it designates. It is not enough to say that transportation is a factor. We must learn to be very specific regarding what transportation we are talking about, under what conditions, over what time, at what cost, and for whom it is a factor.

Towards a Functional Description of Employability

Diagnostic labels currently emphasized in rehabilitation are inadequate, sometimes misleading, and inconsistently applied. "Mild" to one person is not always seen as mild to another. Grouping people by a designated degree of disability or by diagnostic disease is inadequate to understanding human functioning and employability. While there are practical needs of policy makers and administrators who provide services or funds to individuals who qualify as disabled, the traditional medical diagnostic model of disability is seriously flawed as a tool for guiding social services policy and for gaining an adequate understanding of human functioning.

Secondly, diagnostic labels lead to both collecting the wrong data about employability and to errors in the analysis of the data collected. For example, the diagnosis known as cerebral palsy is typically credited with causing an employment handicap for an individual. The thinking therefore goes that the more severe the condition of cerebral palsy, the more severe the employment handicap will be. Such generalizations are not useful.

Of all the approaches to the assessment of employability, a functional indicator approach offers the most feasible way to operationally define the factors contained in the concept (Rehabilitation Services Administration, 1980). However, environmental indicators need to be an integral part of the total approach. Through this necessarily individualized effort, one can establish both the function and the extent to which it may be an indicator in relation to one or more environmental settings. Not only is the person with the disability the target for change, but also the environmental obstacles which are now identified. The functional approach is more promising than rehabilitation's prevailing approach of simply designating people on the basis of diagnosis and perceived degree of disability.

The Ultimate Challenge

Scientific advances in medicine and health care have made it possible for disabled people to survive as never before in the history of mankind. However, people who would have died previously are not only surviving, but the life expectancies assigned to them could now span several decades. Thus in recent years, society has become faced with increasing numbers of disabled individuals who are expected to live longer than ever before, and whose disabilities are far more extensive than at any time before. A Parliamentary Committee (Canada, 1981) found that more than two million Canadians are mentally or physically disabled, a figure amounting to about 10% of Canada's population.

To the degree possible by the provision of dollars, disabled individuals today are best off in our society when they can be compensated fully by Court awards. But in the interests of justice and human rights, it should not matter what the etiology or cause of disability is. With or without compensation from the Courts, in society at large there is yet to come a general expectation that disabled people will be full participants in the mainstream of Canadian life. While there are a number of reasons for this circumstance, full participation is possible if there is a will to identify and remove the obstacles to equality of opportunity.

In the past decade, there has been a change of attitudes reflected in provincial human rights' codes and in the Charter of Rights and Freedoms. While the full impact of the Canadian Charter has yet to be felt, a number of authors (Lepofsky, 1985; Lepofsky & Bickenback, 1985) have already written articles about the guarantee of equality to disabled persons, and the provisions of Section 15 (1)[3] in prohibiting discrimination because of mental or physical disability.

Lepofsky (1985, p. 29) takes the view that disabled people cannot be denied an opportunity to participate in an activity such as employment because of an inaccurate underestimation of their capabilities to undertake work and gain from it. For example, in assessing an applicant's ability to perform the duties of a job, opinions as to employability of a qualified disabled person may now be subject to challenge under the Charter. Lepofsky believes that the factual matter must be established by clear and persuasive evidence and not by intuitions, impressions, and speculations. Furthermore, the burden is on the defendant (the employer) to prove that the plaintiff's disability renders him or her wholly incapable of undertaking the essential responsibilities of the job.

In order to reach a fair and accurate assessment of the functional capacities of disabled persons, their abilities should be examined on the assumption that they have available to them reasonable accommodations in the work place. Reasonable accommodations may include adaptive equipment such as eye glasses, alterations to the process by which a job is undertaken, modifications to the work place, and personal services in the employment setting (Baker, 1983). What will actually be included will depend upon what reasonable people construe reasonable to be.

Reasonable accommodation in the work place may then require change in the work environment. With the functional approach to employability assessment, the environmental obstacle becomes the target considered for change, not the qualified applicant with the disability. Thus the functional approach advocated earlier in this article is well suited to identifying the environmental barriers to employability.

In the new era ahead, the ultimate challenge will be to see how quickly we can enable Canadians to become full participants and productive contributing members in our society. We need to broaden our conceptualization of employability to include social and environmental factors as well as personal characteristics and skills. By so doing, we can move rapidly towards operationalizing the critical factors, in a systemized way, and in all three of these areas, that contribute to employment outcome. The achievement of a generally accepted, broad and operationally defined description of employability is the first step for research in vocational rehabilitation, research which reflects the current scope of human rights legislation.[4]

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FOOTNOTES

[1] More recently, a sophisticated approach was introduced to the Courts to determine loss of promotability and career advancement to an injured plaintiff who had returned to work following his or her accident. The technique known as "Earnings Progression Curve Analysis" has been utilized by human resources management specialists for years in business and industry. In the McTaggart-Cowan v. Air Canada case, this technique was apparently applied for the first time in Court damage assessment. For the decision, see decision of Smith, J., heard on April 11, 1983, Ontario High Court, summarized in All Canada Weekly Summaries, Vol. 19, 2nd edition, p. 196. For a description of the technique and its application in the McTaggart-Cowan case, see Westcott, G.A., Calculating loss of opportunity for career advancement: Clearing the clouds in the crystal ball, in the Advocates' Quarterly, (Oct. 1983), Vol. 4, No. 3, pp. 268-279.

[2] The so-called "Trilogy" of cases came before trial judges in Alberta, British Columbia, and Ontario in 1974 and then went before the Supreme Court of Canada in June 1977 (Supreme Court Record, Vol. 2, January 1978).

- Andrews et al. v. Grand & Toy Alberta Limited et al. (1974), Western Weekly Reports, Vol. 5, p. 675 and (1978), Supreme Court Record, Vol. 2, p. 229.
- Teno et al. v. Arnold et al. (1974), Ontario Record, Vol. 7, 2nd edition, p. 276; and (1976), Ontario Record, Vol. 11, 2nd edition, p. 585; and Supreme Court Record, Vol. 2, p. 287
- Thornton et al. v. School District No. 57 (Prince George) et al. (1978), Supreme Court Record, Vol. 2, p. 267.

[3] Charter Section 15 (1) provides: 15(1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age, or mental or physical disability.

[4] For an ongoing discussion of decisions made through provincial human rights codes, see the Canadian Human Rights Reporter. Volume 5, published in June 1984, provides an historical perspective on the evolution of human rights through international law, the United Nations Charter, and Canada's important contributions. Strictly speaking, provincial human rights codes interact with the Charter in a variety of ways and may provide the only remedy to alleged private (as opposed to public) discriminatory conduct.

FAMILY ADJUSTMENT TO CLOSED-HEAD INJURY: IMPLICATIONS FOR REHABILITATION COUNSELLING

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This paper reports on part of a recently completed study which explored psychological adjustment of the parents of ten head-injured adults. In-depth interviews with each of the parents resulted in the emergence of ten major and two minor themes related to the adjustment process. Results are discussed in terms of their implications for individual and family intervention strategies that can be used during the rehabilitation process.

Head injuries are a major health problem in all parts of the Western World (Jennett & Teasdale, 1981). Modern advances in medical technology, particularly in improved intensive care treatment procedures, have resulted in a steadily increasing number of people who survive head injury. The latest figures for Canada suggest an incidence of 20,000 to 30,000 serious head traumas each year (Ivan, 1984).

The most important fact from these statements is that many young adults, having incurred a severe head injury, are attempting to cope for the rest of their lives with permanent physical, cognitive, and psychological disabilities. Not only do the injured persons face chronic adjustment problems which limit their functioning within their home, work, and social environments (Wolfe, 1984), but entire family units are often disrupted. The families are affected from the moment of onset of the injury with the nature of the stresses changing over the course of the prolonged and uncertain recovery (Bond, 1983). It is also clear that for total adjustment to occur, family needs and issues must be considered at each stage of the rehabilitation process. Bray (1978) suggested that families of injured persons travel similar paths to adjustment as do the injured persons themselves, and Buchanan (1981) discussed thirteen practical problems that families must deal with, ranging from frustrating experiences with members of the health care system to facing the death of the ill or injured family member. In terms of assisting families of people with disabilities, Bishop, Epstein, and Baldwin (1981) reported that family support promotes a positive outcome in rehabilitation, that families need to be educated in a number of areas, and that family role functioning is often dramatically changed by the disability of one of its members.

In the past much more attention was given to restoring physical function in people with closed-head injuries than to dealing with the psychological and emotional consequences of the injury. In general, it appears that physical deficits show a much greater tendency in head-injured individuals to improve and, even if they remain, to produce fewer problems for the patient and family than do mental difficulties (Bond, 1983; Lezak, 1978; Oddy, Humphrey & Uttley, 1978). Once the head-injured person is discharged, the burden of caring for that individual generally falls upon family members who are then required to cope with a situation about which they have little information (Bond & Brooks, 1976). This often results in family tensions to the point where the injured person may be rejected.

Many studies have indicated that both head-injured individuals and their families experience changes in thier lives which interfere with the overall readjustment process (Lezak, 1978; Mauss-Clum & Ryan, 1981). Post-traumatic psychological disturbances may take on a variety of characteristics including chronic anxiety, irritability, impatience, depression, restlessness, apathy, aggressiveness, and difficulties in memory and concentration (Bond, 1983; Lishman, 1973; Miller, 1979; Thomsen, 1974). Bond and Brooks (1976) suggested that family attitudes may become pathological when denial of the seriousness of the injury becomes the primary coping mechanism, resulting in decreased ability to accept the fact that further recovery is unlikely. Rosenthal and Muir (1983) looked at losses experienced by a head-injured person as a "partial death" which leaves other family members in a state of confusion and disorganization because they do not know what to mourn. According to Rosenthal and Muir (1983), family adjustment to closed-head injury is different from adjustment to most other injuries because head-injured people often demonstrate sufficient indications of improvement to foster prolonged, pathological denial. Denial as a coping mechanism may be adaptive during the initial adjustment phase, but later on becomes pathological and, by its very nature, interferes with family adjustment. Bond (1983) stated that denial in families of closed-head injured individuals can go on much longer than in families of people with other disabilities. This is especially relevant in that, according to Bond (1983), it may take one to two years before families of head-injured individuals develop realistic understandings and expectations regarding the implications of the injury. This prolonged recovery process can be a great obstacle to rehabilitation of the head-injured individual.

In light of these considerations, the present paper is an expansion of part of an earlier study (Karpman, Wolfe, & Vargo, in press) investigating prominent issues in the psychosocial adjustment of parents of head-injured adults. In this paper, we conclude by recommending ten family intervention strategies based on an integration of the emerging themes and the related literature.

Methodology

The objective of the present study was to obtain a more comprehensive understanding of the adjustment problems and critical issues experienced by close relatives (in this case parents) of head-injured adults. It attempted to identify common themes related to the adjustment process. These themes were derived using the procedures employed by Vargo (1984). Data for this study were obtained via indepth interviews.

Sample

Participants were the parents of ten head-injured individuals who had undergone medical treatment at a large urban rehabilitation hospital. The head-injured individuals were between the ages of 17 and 24 and were single at the time of the accident. Each had incurred a severe closed-head injury resulting in a coma of at least six hours duration and post-traumatic amnesia for at least 24 hours. All injuries occurred one to five years before the parents were interviewed for this study. Mean WAIS-R post-injury I.Q. of the head-injured individuals was 93, and each person fell within one standard deviation of an average I.Q. Interviews varied in length from one to five hours. All interviews were audiotaped.

Analysis

Transcripts of all interviews were analyzed by two raters utilizing a synthesis of the works of Colaizzi (1978), Collier and Kuiken (1976), and Vargo (1984).

Each interview was examined for specific statements relating to the experience of adjustment being investigated. Lengthy descriptions were condensed to essential ideas with care being taken to preserve the spirit of the expressed idea. All expressions containing the same essential ideas were grouped into categories, called themes. These themes were then referred back to the original expressions in order to validate them. Themes were then divided into major and minor. A major theme was considered to be one in which at least 50% of subjects expressed the same idea. Minor themes were those in which 33 - 49% of the subjects expressed the same idea. Ideas expressed by fewer than one-third of the subjects were considered due to individual differences, and were deleted from subsequent analysis. Inter-rater reliability was established by having an independent pyschologist repeat the previous steps using data of five randomly selected subjects.

Results

Many elements of the head injury experience were common to most, if not all, of the participants. Overall, ten major themes and two minor themes emerged for the parents. Many of the themes were expressed repeatedly for any one person. Those themes presented first reflect issues that were prominent in the early post-injury period, while those at the end describe issues that were important in the later stages (up to five years post-injury) or were persistent throughout.

Theme 1 (major) - Positive attitude, hope, and optimism. Most parents expressed the need to provide a positive outlook for both themselves and their injured child. They felt it was necessary to hold on to the belief that improvement would continue from day to day and that it required parental encouragement to get the brain injured individual going.

Theme 2 (major) - Constant care and attention. Parents tended to remain by the side of their children for as long as possible, and to talk continuously to ensure stimulation for the head-injured individual.

Theme 3 (major) - Strong belief in religion. Religion played an important role in the life of most of the parents. They felt they needed someone stronger than themselves upon whom to rely, and that this deity was watching over them and helping them through this very difficult time.

Theme 4 (major) - Resistance, perserverance, and internal strength. Most parents talked about setting aside many aspects of their lives in order to find the strength to concentrate on getting through each day. Many expressed the feeling that they did not know where the energy came from to continue with their main purpose.

Theme 5 (major) - Cohesion and cooperation within the family. Most parents spoke about how this difficult experience brought the whole family closer together, and how the family pooled its resources to accommodate to the situation.

Theme 6 (minor) - Physical exercise and cognitive stimulation as therapy. Some parents stated that it was important to feel that they were actively participating in their child's recovery. Many spent hours playing cards, games, and, in general, trying to get the head-injured individual's mind off of the accident.

Theme 7 (major) - External support systems. Some parents felt that external support was stronger than others. Those who did have such external support were appreciative of the extra help offered to them. Parents who did not have easy access to friends or neighbours expressed a wish that they would have had so that they could get some relief time from the constant care and attention of their child.

Theme 8 (minor) - Struggle for acceptance. Some parents expressed a major difficulty in accepting the reality that the accident had occurred and in coming to terms with the realization that the child they knew now may not be the same as the one they knew before the injury.

Theme 9 (major) - Provider of guidance and advice. Some parents took the role of providing guidance and direction in order to get their children back on to the right track. These parents often acted as confidants.

Theme 10 (major) - Overprotectiveness. Many parents had the sense that their children were vulnerable, fragile and helpless leading them to protect their children because they were not strong enough to face the world alone. At the same time, these parents tried to arrive at the point where they were aware that they would not always be available to their children to watch over them.

Theme 11 (major) - Financial problems. Fifty per cent of the parents expressed the financial burden of having to care for their injured child. Lack of finances placed another strain on an already difficult situation.

Theme 12 (major) - Emotional strain. Nearly all of the parents expressed experiencing some type of emotional strain. Nursing the head-injured individual back to health took its toll on many.

Recommendations for Counselling

Based on a review of the literature and the experience of the parents interviewed for this study, a number of recommendations are proposed. They are offered in recognition of the importance for all members of the health care team to be sensitive to family needs and issues in order to promote the trust and cooperation that is necessary for successful adjustment on the part of all family members. It should also be mentioned that although the recommendations focus explicitly on parents of head-injured individuals, it is likely that many may apply equally well to situations in which the head-injured individual is a parent or spouse.

1) Probably more than anything else, family members need caring, non-judgemental support (Bishop et al, 1981; Jacus, 1981; Montgomery, 1984). Counsellors are in a particularly unique position to provide family members with the experience that someone else does understand and appreciate their position (Theme No. 7).

2) Similarly, family members need to know that other people have undergone, or are currently undergoing similar experiences so as to not feel "alone against the world" (Theme No. 7). Peer support groups can be particularly helpful in this regard (Diehl, 1983; Rosenthal & Muir, 1983).

3) Counsellors can also help parents come to understand that their negative feelings (for example, anger, frustration, and guilt) are a normal part of the grieving process and can be expressed (Buchanan, 1981; Fortier & Wanlass, 1984; Jacus, 1981; Lezak, 1978; Montgomery, 1984). In this respect, Kornblum & Anderson (1982) argued that because it is not know exactly how other children or their families will be affected by a variety of disabilities, it is more appropriate to consider parental grief as ongoing and periodic rather than as a negative reaction which must be resolved in the interest of "acceptance". (Theme No. 12).

4) Families also need to accept that they must go on with their own lives as well (Lazak, 1978). Families cannot always be there for the injured person only (Theme No. 2). Similarly, Montgomery (1984) emphasized the importance of family members leading as normal a life as possible and of spending time together in the absence of the head-injured individual.

5) Counsellors can help families understand that it is permissible and appropriate for them to ask for help when they feel they need it. The type of help required may take many forms, including financial assistance or someone to periodically relieve the family members of their attendant duties (Theme Nos. 2, 7, 11).

6) Families must be educated (Bishop et al, 1981; Diehl, 1983; Fortier & Wanlass, 1984; Rosenthal & Muir, 1983). Often parents require information on such basic matters as discharge planning (Jacus, 1981) and how to physically manage the head-injured person once that individual is discharged from hospital. Similarly, the counsellor can give information regarding probable expectations in terms of what the person with the head injury may be able to accomplish in the future (Jacus, 1981), and in this way help families come to terms with the reality of the disability (Theme No. 8).

7) Families need to understand that despite their best efforts, they cannot change the medical reality of the head-injured person's situation (Lezak, 1978). Nonetheless, it is very important that family members perceive themselves as having some impact on the injured member's adjustment process; i.e., feel that they are active participants in the overall adjustment process (Theme No. 6). Depending on the nature of behavioural disturbances and the degree of the injured person's awareness, parents may need to be taught behaviour management techniques. They then can respond to inappropriate behaviours with understanding and skills rather than anger, hostility, or over-protection. Some parents may also need to learn how to provide behavioural cues and feedback to help the injured person cope with cognitive deficits such as memory and learning problems.

8) Especially when children are part of the family, parents must come to a workable arrangement in terms of how much care they can realistically devote to each family member (Lezak, 1978). This often necessitates role adjustments on the part of all members of the family (Rosenthal & Muir, 1983) in order to accommodate the functions that are no longer possible for the head-injured person to perform. It is easy for loving and devoted family members to spread themselves too thin (Theme Nos. 9, 10), or to unwittingly encourage dependence in their head-injured offspring.

9) Counsellors can help family members pool their resources in caring both physically and emotionally for the closed-head injured person (Friedrich, 1977). Freeman (1981) expressed the matter as follows: "The therapist must recognize the impact of the disability on family functioning, while at the same time recognize how the family can serve as a resource to itself for dealing with its needs and difficulties" (p. 187). Parents in the present study often spoke of how the experience brought the whole family closer together and how they pooled their resources to accommodate the situation (Theme No. 5).

10) Counsellors can also help family members tap sources of strength currently present in their own lives; for example, religious beliefs (Theme Nos. 1, 3, 4). As expressed by Jacus (1981): "Perhaps one of the most valuable services a health professional can render is helping individuals assess their personal support systems" (p. 11).

Conclusion

Counselling families of head-injured adults presents a unique challenge to the skills and flexibility of health care professionals. The therapist who undertakes counselling with these families must have not only the usual therapy skills but must also be aware of the realities of the brain injury and the atypical grieving pattern of the family. As the family progresses through the recovery process, the counsellor's role changes from educator, to family therapist facilitating role changes, to behaviour management instructor, to environmental manipulator. However, within these roles, the counsellor must remain a caring supporter and family advocate. Needless to say, the expertise of more than one individual may be required to fulfill all these roles. The next research step is to examine the efficacy of introducing long-term counselling into the rehabilitation process and isolating the counselling components and strategies that are effective with this population. Overall, the addition of counselling for families of brain-injured adults holds promise for relieving the emotional impact and for teaching coping strategies. Counselling can help curtail the disintegration of many families which often leaves the injured person alone and a life-long dependent on society.

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SYSTEMATIC DESENSITIZATION AS AN ADJUNCT TO VOCATIONAL TRAINING IN A CASE OF A DEVELOPMENTALLY HANDICAPPED ELECTIVE MUTE

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ABSTRACT

This study describes the development and early stages of a treatment programme for a young adult woman who presents a behavioural pattern of elective mutism. The nature of elective mutism and treatment approaches were reviewed. Topics of interest which the case addresses include the description of an adult elective mute, and the application of systematic desensitization with elective mutism. The current case describes how a disturbance in social behaviour can have adverse effects on vocational performance, and the efforts taken to remediate this problem. This presentation highlights the importance of assessing and treating disorders of social and adaptive behaviour during the process of vocational training in order to further augment vocational adjustment.

SYSTEMATIC DESENSITIZATION AS AN ADJUNCT TO VOCATIONAL TRAINING IN A CASE OF A DEVELOPMENTALLY HANDICAPPED ELECTIVE MUTE

Vocational training and rehabilitation of developmentally handicapped individuals is becoming a growing concern with recent trends toward deinstitutionalization and community integration (Bassuck & Gerson, 1978; Menolascino & Eaton, 1980; Rosen & Clark, 1977; Stacy, Doleys & Bruno, 1983). Competence in vocational skills, for instance, is associated with successful adjustment to the community (Menchetti, Rusch & Owens, 1983; Schalock & Harper, 1978; Schalock, Harper & Carver, 1981;

Scheerenberger, 1976; Scheerenberger & Felsenthal, 1977). Planning for vocational training for developmentally handicapped persons necessitates attention to at least two major areas (Halpern, Lehmann, Irvin & Henry, 1982). The first and more traditional area involves intellectual functioning, aptitudes, abilities, and interests. The second involves social and adaptive behaviours which can serve either to facilitate or impede work performance. Until recently, most efforts have focussed on the former, more traditional areas by attempting to improve work performance or production (Martin & Pallotta-Cormick, 1979; Rusch & Schutz, 1981). The targeting of social and adaptive behaviours as a focus for change has been relatively neglected. The purpose of this article is to present a case in which a behavioural disorder has had an adverse effect on vocational adjustment and performance. In discussing the case and the treatment provided, we would like to stress the importance of attending to both the adaptive as well as the work performance behaviours in the rehabilitation of developmentally handicapped persons.

Elective Mutism

The case involves a young adult woman who presents a behavioural pattern of elective mutism. The essential feature of this behaviour disorder is that the client does not speak outside of familiar places with family or intimate acquaintances (American Psychiatric Association, 1980). Within these social situations, however, speech is typically fluent. The disorder is usually diagnosed when the child first goes to school and refuses to talk (Croghan & Craven, 1982; Cunningham, Cataldo, Mallion, & Keyes, 1983; Kolvin & Fundudis, 1981; Kupietz & Schwartz, 1982). In 90 per cent of cases noted on school entry, improvement occurs spontaneously over the first school year (Brown & Lloyd, 1975). Persistence of the disorder beyond the first two years of school is extremely rare (Kolvin & Fundudis, 1981) and Goll (1979) states that elective mutism is "unknown after the age of puberty" (p. 64).

Associated Factors

Controversy surrounds several characteristics associated with elective mutism. Many authors note a higher incidence of speech difficulties among elective mutes than among the population in general (Cunningham et al., 1983; Kolvin & Fundudis, 1981; Kupietz & Schwartz, 1982; Richards & Hansen, 1978; Wergeland, 1979). It is speculated that these difficulties are of etiological significance because elective mutism may be a behaviour that is reinforced by the avodance of embarrassment and criticism that occur when the client speaks (Kupietz & Schwartz, 1982; Wergeland, 1979). However, no mention is made of speech difficulties in many recent case histories (Austad, Sininger, & Stricklin, 1980; Croghan & Craven, 1982; Lipton, 1980; Morin, Ladouceur, & Cloutier, 1982; Sanok & Striefel, 1979).

Another controversial area is that of intellectual factors. Some authors note below average IQs among elective mutes (Kolvin & Fundudis, 1981) while others claim that IQs tend to be average or above (Ambrosino & Alessi, 1979; Colligan et al., 1977; Lipton, 1980; Rosenberg & Lindblad, 1978).

Other factors associated with elective mutism include an increased incidence of temperamental and behavioural difficulties (Croghan & Craven, 1982; Cunningham et al., 1983; Kolvin & Fundudis, 1981; Kupietz & Schwartz, 1982), and a tendency for the disorder to affect females more often than males (Cunningham et al., 1983; Kolvin & Fundudis, 1981; Wergeland, 1979).

Finally, elective mutism has been associated with several familial factors such as marital discord (Ambrosino & Alessi, 1979) and parental personality disorders (Kolvin & Fundudis 1981). Cunningham et al. (1983), however, point out that methodology and sampling procedures vary among studies and note that Brown and Lloyd (1975) found no evidence of serious discord in families of elective mutes. Minority cultural background (Bradley & Sloman, 1975), bilingualism (Croghan and Craven, 1982), and physical and social isolation (Goll, 1979; Wergeland, 1979) also tend to occur more frequently in this population.

The varied factors associated with elective mutism have led several authors to theorize that at least two subgroups of elective mutes exist (Croghan & Craven, 1982; Cunningham et al., 1983). The first displays significant social anxiety (Croghan & Craven, 1982) with symptoms being negatively reinforced by the termination or avoidance of speech demands (Cunningham et al., 1983; Kupietz & Schwartz, 1982). The second displays multiple temperamental or behavioural difficulties and seems to attempt to coercively manipulate the environment for attention (Wergeland, 1979) or other secondary gain (Croghan & Craven, 1982; Cunningham et al., 1983; Kolvin & Fundudis, 1981; Kupietz & Schwartz, 1982). Croghan and Craven (1982) note that this second subgroup is probably the most resistant to treatment. The heterogeneity of elective mutes points to the need to carefully assess the specific speech patterns, etiological factors, and associated characteristics that occur in a particular case before initiating treatment.

Treatment

A variety of approaches have been used to treat elective mutism. Psychoanalytic therapists have stressed that no direct demands can be placed on the client to speak (Ambrosino & Alessi, 1979). The elective mutism is considered to be symptomatic of an underlying pathology and indirect approaches (Anthony, 1977; Heimlich, 1981) have been used to gain the trust of the client, examine the underlying pathology, and help alleviate the symptoms. Although the literature shows successful outcomes, the efficacy of treatment is not necessarily demonstrated since control groups are absent and the symptoms of elective mutism may disappear spontaneously. The issue of generalization beyond the treatment environment is also not always addressed.

Those committed to a group-dynamic or sociological view of elective mutism have stressed the necessity of including the entire family in therapy (Goll, 1979; Kolvin & Fundudis, 1981; Rosenberg & Lindblad, 1978). They have not, however, ignored the necessity of additional, direct work with the elective mute, whether this therapy is traditional (Goll, 1979) or behavioural (Rosenberg & Lindblad, 1978). Cunningham et al. (1983) point out, however, that the relative contribution of family therapy and related interventions remains to be evaluated.

Some authors have observed spontaneous symptom improvement following the movement of the client into an entirely novel environment (Wergeland, 1979; Zondlo & Scanlan, 1983). These authors suggest relocation as a possible intervention strategy. This suggestion rests not on theoretical grounds, but practical ones. However, the positive outcomes have not been observed to be consistent (Wergeland, 1979).

Recent behavioural interventions have consisted primarily of stimulus fading programmes, with or without positive reinforcement (Austad et al., 1980; Lipton, 1980; Richards & Hansen, 1978). Cunningham et al. (1983) point out that these two procedures are functionally similar since both are designed for anxiety-based elective mutes and attempt to reduce the anxiety associated with speech to specific individuals. Reinforcement without stimulus fading has been effective only where baseline speech is present (Morin et al., 1982) and hence where reluctant speech rather than elective mutism may be the more accurate diagnosis. In vivo desensitization has also been used. Desensitization procedures seem particularly appropriate (Sanok & Ascione, 1979) considering their effectiveness in treating circumscribed phobias and the similarity of anxiety-based elective mutism to such disorders.

Although behavioural treatments have often been effective, many show inadequate choice and specification of dependent variables, a failure to investigate generalization of behaviour change, and a lack of rigorous behavioural assessment of the client prior to treatment implementation (Sanok & Ascione, 1979). Thus, despite a substantial literature on elective mutism, the need still exists for carefully controlled, well documented experimental interventions.

The following case is of interest for several reasons. It presents a treatment approach designed to resolve a behavioural problem which has hindered vocational training. An important aspect of the intervention is that it is carried out by the client's parents and workshop supervisor. The case also describes the treatment of the oldest elective mute yet reported. In addition, the first application of systematic desensitization to a case of elective mutism is described.

Methods and Results

Client

The client is a twenty-eight year old, developmentally delayed female. Her degree of delay, based on measures of intelligence and adaptive behaviour is moderate. She lives with her parents in a rather isolated community, but within a thirty minute drive of the city where she works in a sheltered workshop. She was referred because of the negative impact her elective mutism was having on her work training programme and her social adjustment at the workshop. That is, she could not ask questions to get help from her supervisor or give information when necessary. Also, she could not converse with co-workers which in turn limited her development of positive peer relationships.

The case was formulated in terms of a phobic avoidance paradigm based on several observations. The parents noted that the client dislikes drawing attention to herself to the point that she will leave the room to cough or sneeze. Factors which seem to contribute to the mutism include lack of familiarity, the age of a person (she talks to children), the level of noise in the environment, whether assertion is required, the presence of strangers, and lack of familiar surroundings. Finally, the client has told her parents that she wants very much to be able to talk.

Other factors of possible importance include the client's shy temperament and mild speech dysfluency. Cognitive factors include the expectation that she will be laughed at and will not fit in with her peer group if she talks. Maintaining variables include the fact that her parents speak for her and possibly reinforce non-verbal communication outside the home or in the presence of strangers. Furthermore, non-verbal communication has reached sophisticated levels including gestures, facial expression, and occasional written notes.

Surprisingly, the client will speak to virtually anyone on the telephone when she is at her home. Telephone calls to the client were initiated as a means of developing a close, trusting relationship with the client and were maintained throughout treatment to obtain her direct input and feedback regarding the treatment approach.

Assessment Methods

Workshop Assessment. An operationalized definition of a vocalization or verbalization, based on that used by Strain, Shores and Kerr (1976), was used at the workshop. Speech was time sampled by the client's workshop supervisor for two fifteen minute periods a day. Vocalizations were classified as to whether they were initiated or responses and as to whether they were made by the client, a co-worker, or the supervisor. The client's vocalizations were further classified according to whether they were directed to the supervisor or a co-worker. Reliability checks were performed on approximately 10% of the samples and observational drift was minimized by giving the workshop supervisor feedback on the results of each check. Results showed a baseline rate of vocalization by the client of zero. Vocalizations directed at the client by others averaged 4.52 per session (SD = 2.74). Inter-rater reliability was 85.9 per cent.

Home Assessment. In consultation with the parents, people to whom the client spoke comfortably were identified, and the parents recorded incidents in which the client spoke in situations where such persons were present. Results showed an average baseline rate of 1.25 instances of speaking to or in the presence of new persons each month.

Treatment-Related Assessment. Assessment probes were used prior to and during treatment. These probes involved assessment of number of syllables of speech produced during presentation of low, middle, and high items from desensitization hierarchies which were conducted at home by the client's mother and tape-recorded for later analysis. One purpose of these probes was to determine whether adequate stimulus dimensions were being sampled for inclusion in the hierarchy. This was important since it was necessary to know that the client could clearly imagine the desensitization situation with appropriate emotion and vividness (Rimm & Masters, 1979; Wolpe, 1973). The index that was used in this determination was response suppression. Because the client's elective mutism appeared related to anxiety, it was hypothesized that her rate of verbalization would decrease when relevant stimuli were included in the hierarchy, and that a greater decrease (i.e., more response suppression) would occur with items farther up the hierarchy. The use of the results from these probes to develop an appropriate desensitization hierarchy is described below. In addition, speech during presentation of hierarchy items was recorded for later of analysis of number of syllables produced.

Treatment

First Hierarchy. The first hierarchy was developed with the client over a series of telephone calls, and consisted of 15 items involving situations in which the client might show increasing anxiety if asked to speak. Hierarchy items were photographed and made into slides. Tape recorders, slides, screen, and projector were sent home and the client's mother was taught to operate them. The client was asked to watch the slides while talking with her mother and their conversations were recorded.

In order to determine whether the slides were effective as stimuli and could elicit some anxiety, a probe was made up of three items chosen from the hierarchy. The lowest, the middle, and the highest items were each presented three times in a counter-balanced order. The slides were shown for 30 seconds with new slides being presented every 90 seconds. This nine-item probe was presented three times, once on each of three evenings, with the client at home alone with her mother. It was hypothesized that the client, when conversing with her mother, would show response suppression to the probe items as a function of their position in the hierarchy. However, a clear pattern of increasing response suppression with higher items on the hierarchy did not occur. Therefore a second hierarchy was tested.

Second Hierarchy. The second hierarchy probe was based on the same slide items and timing sequence as the first probe, but additional demands were placed on the client and her mother. First, they were to imagine that the people in the slides were actually present and listening to them. Second, they were to keep in mind that the consultants would listen to the tape of their conversation. These additional demands still did not produce a pattern of increasing response suppression to items higher on the hierarchy.

Third Hierarchy. The previous two hierarchies had demonstrated that despite the fact that the stimuli seemed to elicit anxiety in real life for the client they were not doing so as slides. It was therefore decided to make the stimuli more realistic by adding an auditory component to each of the slides. This consisted of presenting taped open-ended questions asked by the persons involved in the particular slides. The same timing and sequence were used in this hierarchy as in the previous two hierarchies. Thus each person in the probe asked three questions, one for each of the slide presentations, for a total of nine questions. Response suppression was again measured by comparing the number of syllables in responses to hierarchy items. This probe again resulted in no clear pattern of response suppression.

Fourth Hierarchy. With the goal being a further increase in realism, it was decided to use videotapes in the desensitization procedure. It was also decided to vary the location of the client's mother during presentation of the videotaped items. A nine-item hierarchy was constructed in which the workshop supervisor, the client's work partner, and the client's programme director each asked 45 questions via video tape. The location of the client's mother was varied during the presentation of each questionner's tape from beside the client, to behind the client, to out of the room. The questions asked on the tapes were open-ended and directly related to the client, and could be answered in one word or a longer explanation and with different answers on different days.

A probe tape was made consisting of the client's mother, work partner, supervisor, and programme director each asking four different open-ended questions. These persons were presented in a counter-balanced order and the proximity of the client's mother was varied during three presentations of the probe. The results of this probe showed a consistent pattern of response suppression with responses to less familiar questionners containing fewer syllables than responses to more familiar questionners, and with fewer syllables occurring at those times when the client's mother was farther away. Because these stimuli appeared to be vivid enough, desensitization was begun.

Nine steps were constructed for the hierarchy, involving three questionners of increasing unfamiliarity, and three locations of the mother. The hierarchy was arranged so that the client would be first asked to answer 45 open-ended, personal questions presented by her workshop supervisor on video tape while her mother sat next to her. The next step was to use the same video tape stimulus with the mother sitting behind the client. Following this, the mother was completely absent from the room while the client responded to the video tape. This sequence of mother's locations during the video tape presentation was repeated next during the presentations of a tape on which the 45 questions were asked by the client's co-worker, and finally with the questions asked by the director of the client's workshop. The client's responses were tape recorded during each presentation of the video taped stimuli. The criterion for advancing from one step to the next in the hierarchy was that the client should, on average, produce as many syllables per question to the video taped questions asked by either the supervisor, co-worker, or workshop director as she did to video taped questions asked by her mother during the pre-treatment probe assessment.

The client has completed four steps of the hierarchy at this time. No changes have been noted as yet in the productivity of her speech either at home or in the workshop, although ancedotal reports from the workshop indicate that she is demonstrating more interest in communicating with the supervisor, as shown by her more frequent gestures and nonverbal communication.

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PHENOMENOLOGY OF QUADRIPLEGIA: A USEFUL APPROACH IN REHABILITATION

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The individual who becomes a quadriplegic is placed in a complex existential situation. This human phenomenon, which for the individual is the fact of living with a permanent physical handicap, and for a family, living with this individual, creates physical, cognitive, psychological, socio-cultural and spiritual problems for them. This disability may mean total reorganization of their lives. Acceptance of their situation and their ability to function productively involves rehabilitation at all levels. Therefore, an existential phenomenological approach is necessary for the success of any rehabilitation program, either in an institution or in a family setting.

According to Talbot (1984), rehabilitation consists of more than just correcting or compensating for a disability; it consists of developing a way of life. It is inevitably conditioned by what is a socially accepted way of life.

According to Bracken et al. (1980, 1981), the instant change from a physical state of well-being to a complete state of paralysis is, of all human experiences, one which creates such a shock that the individual's first reactions are ones of self-protection. This passage from an active physical state to one of total paralysis places the individual involved in an extremely precarious psychological situation. He must face the reality of the trauma and eventually adapt in the best way possible to living with the permanence of the paralysis.

Consequently, patients have difficulty adapting to their physical illness or their disability without the support of their families. The intrapyschic processes such as denial in the face of loss and of renegotiation of primary fears such as fear of abandonment which affects one's self-image may be influenced by family values and attitudes (Verluys, 1984). It is very important to have the relevant and continuous support of family members or a resource person. According to Hart (1981), Kuwerski (1982) and several other authors, treatment of individuals who have suffered spinal cord injuries is difficult and presents long-term problems.

Current trends in research on the perception of the needs of individuals who have suffered spinal cord injuries and the needs of resource people have been directed for the most part toward meeting the physical needs of these individuals (Stanton 1984). Talbot (1984) writes that it is impossible to find out the innermost needs of a human being by means of traditional medical methods and psychological investigation. He adds that, in order for rehabilitation work to be successful, health professionals must try to find out the intangible values that give life meaning and flavour, that is, they must work toward a rehabilitation concept which recognizes that man is, or is capable of becoming, a spiritual being. It is this characteristic which enables man to transcend almost any physical handicap.

The individual who has a physical handicap is in a situation which encourages the development of incongruity between himself and his experience. According to Rogers (1973), the individual perceives experience selectively in relation to his system of personal values. On the other hand, he perceives all that is contrary to his personal values in a selective and altered fashion. He denies certain experiences because they do not have any value for him, because they are not accurately symbolized and because they are not organized. Consequently, according to the same author, the individual may develop behaviours where there are discrepancies between his personal make-up, personal experience and reality. In the face of an experience that is threatening to his ego, the individual uses defence mechanisms which result in a narrow perception. His perception intentionally no longer reflects reality, or alters it by omitting certain data. The result may be disorganization and a process whereby his ego collapses. Discord develops between his self-image and his experience which is not adequately symbolized; this can lead to confusion and a loss of self-confidence for the individual.

In order to enable him to find his integral equilibrium again, the individual who is a quadriplegic must develop mechanisms that will help him to accept his new condition. Watson (1979) recommends that this change take place in a humanistic-altruistic environment, that is, in an environment of support, protection and mental, physical, socio-cultural and spiritual change.

The same author developed a theory of "caring" that could be used as a basis for a nursing role included in this process. In this theory, the essence of nursing involves the actual nurse-client interaction which has therapeutic results for the client. Taking care of an individual is a humanistic interpersonal action. This action is at the heart of nursing and includes philosophy and nursing science. The subadjacent approach to this theory is a phenomenological existential one. This approach is often the variable which gives the individual the ability to face the various situations in his life and to transcend difficult or conflicting situations. Each person develops a personal, and therefore unique, meaning to his life. When a person is ill, it is his perception of his illness and his reactions, not flight from his illness, which make him feel better, especially when the illness is permanent and progressive.

According to Watson (1979, 1985), nursing must take into account the concept of the individual as a complete person, that is, an entity with a body, mind and soul, an entity whose body is located in time and space, but whose mind and soul transcend the here and now. In order to be able to provide integral care, the nurse must take into account the person's internal and external experience, that is, he must take into account the individual's global experience at a specific moment in his existence. In particular, it is not, above all, the what of the nursing action, or the transaction of "caring" that is important, it is how the transpersonal nature of the interaction between two individuals brings out certain unknown elements within the "caring". Consequently, "transpersonal caring" is a means whereby the individual gradually progresses within a sphere of personal realization, that is, in harmony with his thoughts, his soul and his body. This interaction promotes the development of a greater human capacity for finding the values in existence and in the illness.

The factor of existential phenomenological carative nursing recommended in Watson's theory of "caring" is very important for understanding the individual's ability to face, adjust to and accept his condition of health or illness. The best way to understand another human being is to identify his philosophy of life and to try to see the world through his eyes. The key to nursing is to realize that the health-sickness condition is not just a medical problem. Often the individual's problem is not directly related to his physical illness and his exterior symptoms, but to the state of his soul, which results from how he sees the world.

Methodology

According to Watson, the properties of phenomenology are the following:

1) it is interested in subjective and objective experiences unique to the individual;

2) it adopts a holistic attitude in the face of understanding oneself and others;

3) it maintains that its greatest interest is the individuality of the individual;

4) it values the individual because he is basically good and capable of self-development;

5) it values the integral context of the individual as a more important means of caring for the individual than organic or bacterial pathology.

It follows naturally from this frame of reference that the best research method is the phenomenological method. This qualitative method allows the investigation of a phenomenon as it is experienced by any individual. It makes it possible to describe all phenomena, including human experience. This method makes it possible to understand all the data of the phenomenon being studied by using the perspective of the study subjects. The purpose of the method is to describe systematically the structure of an experience, including the meaning of the experience for the individual who had it. Consequently, the approach used must be as comprehensive as possible and not include any preconceived expectations or direction that may affect the subjects' answers. It allows the investigator to reconstruct the elements of the situation as they take shape in the subject's consciousness. The phenomenological method, as described by Giorgi (1975), recognizes man's intentionality, that is, that man is necessarily world-oriented and that his consciousness is always the consciousness of something. He also puts forward the idea that the subjects are necessarily overlapping in a subject-world relationship. We cannot describe either the objective world or the subjective world. We can only describe the world in the manner that we live it. Giorgi (1975) assumes that everyone is capable of remembering an important phenomenon and describing it. However, an individual's faithfulness in reporting a phenomenon that he has experienced does not mean that the totality of the phenomenon is obtained. It only means that in investigation based on phenomenology, the research subject becomes the world as it is experienced:

- the subject and the world are inseparable;
- the investigation takes place at the reflective level, that is, the subject of our investigation is the relationship between what is experienced and how it is experienced.

According to Merleau-Ponty (1945), the key to phenomenology as a method is the fact that we are concerned with how the subject experiences a situation and this fact requires a phenomenological reduction, that is, we reflect on the experience lived, on the structure necessary for the experience and on what it must be so that the perceptions exist. The reduction procedure is done in two steps:

1) the experience is placed in parentheses, that is, it is considered as it appears;

2) the phenomenon is manipulated so as to draw out the variables which characterize it.

Phenomenology is an attempt to find the possibilities present in a phenomenon without changing its essence.

The authors of this article are currently doing an analytical[1] study of the perception that quadriplegics and members of their families have of their situations. This study is being conducted in a rehabilitation centre in the metropolitan Montreal region. The population consists of 50 subjects who have suffered spinal cord injuries and 50 subjects who are members of these people's respective families. The preferred research method is the phenomenological method. Three research instruments have been developed:

1) a form for collecting socio-demographic data;

2) a questionnaire-interview on how quadriplegics perceive their situation, including the nursing care that they receive;

3) a questionnaire on the resource person's perception of the other's perception and of their overall situation of living with a quadriplegic.

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[1] This research project is subsidized by NHRDP, Department of Health and Welfare, Ottawa, Grant No. 165-29-314.

The subjects are currently being interviewed.

Analysis

The preferred method of analysis is the one developed by Giorgi (1975). This method makes it possible to do a qualitative and essentially rigorous analysis of the content. It finds out first what the concrete life experience means to each subject and then makes it possible to arrive at a general meaning for the phenomenon studied.

The analysis steps of this method are:

- read through the description of the written structure in order to understand the meaning;
- read the same description more slowly to discover all the component sequences of the situation, thereby acquiring a series of component sequences;
- eliminate redundancies, clarify and work out for yourself the meaning of the sequences by connecting them to one another according to the overall meaning of the situation;
- reflect on the various sequences expressed in concrete language by the subject in order to find out the essence of the situation and transform it into scientific language. Each sequence is studied systematically in order to find out what it means in this specific situation for this individual;
- synthesize and integrate the knowledge acquired into a consistent description of the structure of the phenomenon being studied.

This method can be learned, it applies well and makes it possible for intersubject agreement to be reached. It is a rigorous analysis of the content in that the investigator reports the experience as it takes place and describes it without any prejudice. He can then draw out the relevant elements, classify them and categorize them.

An analysis of the content of the interviews will make it possible to identify the concepts which express the feelings of quadriplegics and members of their families. It will also make it possible to identify their defence mechanisms and factors which create discord for them. The new information which will result from this study will be used to develop an approach to rehabilitative nursing care that will be applied on an experimental basis to a similar group of subjects.

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REHABILITATION, PROFESSIONAL PRACTICE AND CHANGING DIRECTIONS

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Introduction

The aim of this edition is to look at a wide range of programmes, demonstration research, theoretical views and practice in an area which may be broadly defined as Rehabilitation. Elsewhere Brown (1984) has suggested that there is little difference in the principles which need to be applied by the social sciences and education in the field of disability. The differences come in the area or levels of applying these principles. If this is true, then there is very considerable need to amalgamate our research and practice information to encourage generalization of knowledge, and to ensure that within professional training and practice that those working in the field of disability have learned and can apply these very broad concepts and practice.

The Field of Rehabilitation - Generalization Across Disabilities

The field of rehabilitation is not a new one, and the role of the behavioural rehabilitation practitioner and social or behavioral scientist is now becoming more clearly defined. In certain fields of disability, particularly that of mental handicap, psychologists have played a predominant role, firstly in behavioural assessment and then in programme design and planning. It is gradually being recognized that these skills, developed through research and demonstration in mental handicap and, more recently, through a range of studies in action research have relevance to other practicing areas. The challenges of behavioural assessment apply across the field of disability regardless of type of handicap. For example, the aspects of environment which involve ecological assessment are relevant to a wide range of disabling conditions (e.g., Bronfenbrenner, 1977; Mitchell, 1986). The issues of normalization and the requirements for return and integration into normal community life are concepts which prevail regardless of the area of disability. The needs for social competence training are as relevant to mentally handicapped persons as they are to physically injured persons, to aged persons and others suffering from other disabilities. The procedures employed may differ in level, but the philosophy may be considered to be generic.

Because of this, it is essential that programme developers and programme administrators in any one area become clearly aware of the developments in other areas of rehabilitation. It should also be recognized that Rehabilitation Education, as it has been called (Brown, 1984), is a multidisciplinary area and differs in a number of ways from Rehabilitation Medicine. A different philosophy and approach are employed. For example, the application of social, educational and behavioural principles of assessment and treatment to individuals with handicapping or disabling conditions follows a different rationale. A major aim of behavioural assessment in Rehabilitation Education is to describe behavioural baseline in order to determine level of behavioural, social or educational programme intervention. The aim is not to classify a condition. Indeed traditional classification by a disease model is antithetical to this approach. Unless administrators and managers of programmes, and those who are in a position to develop the philosophy of an agency recognize such developments, then it is unlikely that advanced programmes in the rehabilitation education field will arise on a general basis.

Rehabilitation Education - Philosophy and Technology

Although philosophy may be critical in terms of creative thinking within any field of rehabilitation, where there is a philosophy, the technical means of putting that philosophy into effect may not exist in a coherent fashion. For example, in Canada, the ideas for integrating disabled persons into the community may often result in a "dumping process" in which individuals survive for short periods of time only to show regression and failure with consequent emotional sequela which handicap their performance even further. It is therefore strongly recommended that rather than simply developing philosophy, a technology of rehabilitation education must also be devised. Further, the behavioural practitioner requires a model for training and application.

Education of Personnel and Development of Rehabilitation Concepts

The current volume is a form of advocacy for the development of appropriate programmes in the area of behavioural science, social welfare and education. Yet in order to bring the programmes about, our current needs for staff education need to be critically examined. We require programmes in this area. Frequently, arguments for the development of new programmes are not easily accepted, and it is even more difficult to gain a foothold in times of economic restraint. Movement to more conservative policies of application frequently arise. Change of existing tertiary education programmes are fraught with difficulties ranging through personal and vested interests and the effects of funding restraints. Very often cost effectiveness is thought to be necessary as a demonstration for such programmes. Yet there are signs in Canada of a genuine search for new programmes and procedures to assist persons with handicaps. The research and practice which arises must be consolidated where possible into coherent practice.

Vocational Counselling is a part of a philosophy of rehabilitation. This philosophy can be expressed in terms of a model which must be comprehensive. For example, it must cover all types of disabilities, all age groups, and must recognize the continuous nature of change for the client who is part of a rehabilitation programme. Growth or improvement is often slow and long term. Ten to fifteen years is not long for forms of rehabilitation to take place. Others may be represented by a life long process of intervention - the aim being to assist the individual to adapt as far as possible to the "normal" environment in which he or she functions. But growth is not the only process, by implication there is also a continuum of decline.

The aim, for example, in conditions such as Alzheimer's disease and allied conditions (Lawton, 1981) is one of retaining and maintaining behaviours necessary for effective living. The same process, but less clearly observable, occurs during the normal aging process. We have barely began to recognize the role of rehabilitation education in this area. When we do we shall recognize that none of us are exempt from involvement in the rehabilitation cycle! It must be recognized that rehabilitation takes place within a variety of environments. By the very nature of human development, these environments must provide stimulation which is suitable for the individual. As a result, both environment and personal development can be described in the form of various continua which interact with each other.

Individuals, whether they develop or decline in performance, and regardless of the disability that they receive, may face similar problems. For example, an individual who receives a disability through genetic, or early environmental deprivation, or an individual who suffers trauma later in life in terms of some of the psychological environmental which impact his or her system, may show similar problems and challenges in terms of recovery. Issues relating to stress, self image and motivation or issues relating to environmental or task unfamiliarity and the principles for dealing with new learning or generalization of skill to new tasks and new environments are common to all these examples.

At the present time, rehabilitation tends to be a piecemeal affair, and many opinions are held by different professionals and the lay public on the likelihood of recovery and development of specific individuals. Not long ago it was professionally suggested that all mentally handicapped children had to remain mentally handicapped, a myth which has been shattered in recent years through changes in philosophy, particularly in terms of integration and normalization, and also in terms of the various learning principles and procedures that have been provided. Further, various chemical processes have been employed to modify individual performance. There are some, like Aaron Smith (1983), who believe that individuals with severe brain injury may show remarkable recovery, although they were suffering from severe damage to the central nervous system from birth. Similar views are held about visually impaired persons, individuals suffering brain injury later in life, while the dependence of many elderly persons and the inevitability of handicap within certain groups who suffer from chronic mental illness are now being challenged.

To a large degree negative attitudes are caused by a lack of knowledge amongst practitioners and the limited state of our art in terms of behavioural rehabilitation. Changes are occurring, many of them very rapidly, which alter the likelihood of success or failure for specific individuals. Indeed in some areas authors such as Cobb (1972) have argued against predicting behavioral outcome because they have proved to be so unreliable. Most people do better than we anticipate, though they may need a period of years to be successful! It is wiser to look at current baseline performance, devise a necessary programme, and see how the individual progresses, and, where necessary, modify the programme when failure occurs.

It is of interest that we are sometimes surprised by the recovery of particular individuals who seem to make large gains in terms of development. Sometimes these gains occur fairly quickly after trauma, while others may take place at a much later stage. The fact is that rehabilitation is a long term process. The work on environmental deprivation shows similar results. Removal from an adverse environment may be associated with later and dramatic increases in cognitive ability (Clarke & Clarke, 1959).

It is also true that most of us will need the services of rehabilitation workers at sometime in our life cycle. Indeed, with the increasing average age of the Canadian population, it is likely that we will have to develop a wide range of services for aging people, not just for physical support, but in terms of social and psychological adaptation.

An Integrated Approach to Rehabilitation

Rehabilitation involves the total individual, but it has been fashionable to suggest that it is possible to rehabilitate in specific areas as in a surgical procedure. However rehabilitation education is a comprehensive process involving an individual's total lifestyle and self image. Yet it has become commonplace in the adult world of disability to provide vocational rehabilitation and sheltered workshops which attempt to provide, in some form or other, some form of limited employment or occupation.

But why do we determine that vocational rehabilitation is an effective domain in which to operate? There are probably several reasons:

1) it has represented a move from institutionalization and provided a means of occupying individuals outside hospital settings, alternatively it saved the family from looking after an individual on a 24-hour basis.

2) it is seen to be dignifying to provide people with work, even though that work may be entirely different from what they had formerly carried out, and even though this work might take place in an environment which is totally different from a normal work environment.

3) vocational rehabilitation, at least at semi-skilled and unskilled levels, is relatively easy. It provides, what psychologists have

> referred to as concrete tasks. That is these tasks can be seen and touched, and maneuvered, and they can be assembled at speed. They can also be done within one place within the environment (Brown & Hughson, 1986).

In terms of our own development as a rehabilitation society, it was elementary that we should start with concrete forms of operation, and understand such procedures within the context of a work oriented society. But there is nothing about human development which suggests that work behavior as such is the only route, or the best route to go in terms of rehabilitation. Some of the major difficulties faced by individuals who suffer trauma lie within home and local community environments. Thus social competence and personal adaption are critical. For example, breakdown frequently occurs in terms of social relationships between individuals who are closest to the individual who is disabled. This aspect is not so readily seen by professional society. Society becomes aware of an individual without a job and without wages, and is less concerned and less able to deal with the problems that might arise through failure in memory function, and problems relating to emotional adaption which in turn may be associated with problems of sexuality or problems of self image within the home or community environment. Society is also less concerned with problems which are associated with stress and burnout which may occur, not just in the handicapped individual, but in other close relatives within the home environment such as spouses, children, and other closely associated individuals. It therefore seems very appropriate that we consider the need for home environment and development in terms of rehabilitation. We are concerned with the family in rehabilitation!

Quite frequently individuals who are in hospital are sent home with minimal guidance in terms of home environment and the stresses and strains that the individual faces in that environment. Frequently the models of rehabilitation do not take into account the needs of the local environment. For example, visual mobility training in Canada is generally carried out in a centre away from the home and social environment, and quite frequently does not involve intensive training within the types of social milieu that the individual will face on return to home or to work environment. This does not mean to say that what is currently provided is not of value, but rather, that it could be of much greater value if there was an attempt to ensure its relevance to the individual's own situation.

However, there are other implications to this type of statement. First, it is thought to be more costly to develop programmes which individualize programmes and supply them in the individual's own environment. They also give rise to dilemmas in the field of staff training and supervision. On the other hand, there are major advantages. Unfamiliarity of environment and task delays learning processes and causes inhibition in terms of performance, and presumably, much lowered self image because failure occurs in such environments (Brown & Hughson, 1986). The last thing that the disabled person needs is an environment where further failure is going to occur.

This of course raises a second issue, namely that quite often when accidents occur (and quite frequently they occur in physically distressful environments), the individual has to be reprogrammed for a job in an entirely new area. For many semi-skilled and unskilled workers this means a sedentary occupation with the accent, quite frequently, on verbal components. And yet the cognitive evidence shows quite clearly that it is the verbal or cognitive components which are more limited, as a rule, than the nonverbal motor perceptual factors in these individuals. Thus relocation in a job means the individual must learn new skills, or attempt skills in which, previously, they have often failed, or find less desirable and interesting. In such cases it would seem advisable to attempt rehabilitation, in the first instance, not in terms of job location, but possibly in family and social adaption within one's community.

Another aspect of programme integration not related so far are those relating to the social and leisure time aspects of performance. Physical fitness is now recognized as a very important component of effective functioning, yet an examination of the records of many people who are disabled shows a preponderance of non-active types of leisure activity. For example, quite frequently when visitors arrive at the home of a disabled person, the conversation, after initiation of greeting with the disabled person, revolves around others who are present. Elsewhere I have referred to this as non-participatory friendships. Leisure time has been divided into a variety of areas by Nash (1953) and others into non-participatory, social, physical and self actualizing activities. Most disabled people spend a disproportionate amount of their time in non-participatory leisure activities. They are often house bound, find movement difficult, and may not be encouraged or accepted within society. Yet the development of other types of leisure activities promote social interaction, improve self image, increase motivation and improve physical well being. All these factors are necessary in obtaining and retaining a job. It is therefore suggested that leisure time activity and rehabilitation within a leisure time domain may also be critical to the rehabilitation of handicapped individuals. This work is dealt with more expansively elsewhere (Beck-Ford & Brown, 1984; Brown & Hughson, 1986). If these arguments are correct, another implication follows. Initial cost outlay may well be offset by longer term gains through adaption via an integrated approach to rehabilitation.

Once again we see that the impact of rehabilitation education is of a long term nature, and complex. The "payoff" is inevitably going to be over a long time period. This means a fundamental change in terms of our policies towards rehabilitation from a funding perspective. It also, if the argument is correct, means fundamental changes in terms of how we educate social, educational and behavioural professionals to work with disabled persons. For example, assessment procedures do not need to be just vocational, nor simply geared to reemployment of the individual, but must also take place in relation to other types of environment.

Differential Improvement Following Disability

It is important to recognize that environments in which we place people are those that are thought most suited to the individual's need. One important question is, "why do some individuals improve more than others following traumatic disabling instances although their conditions and backgrounds may seem rather similar?" One reason may be that the successful individual is provided with, often by circumstance, a more effective environmental structure. This raises some important issues, the most relevant of which is what type of environment is necessary for positive rehabilitation processes to take place. Of course it is not as simple as this. Environments are complex, and different individuals have different needs, but one of the features of any effective model of rehabilitation must be that a high amount of environmental structuring must be present because there is some indication that where handicap occurs, or where there is poor learning taking place, incidental learning is ineffective. In other words, exposure to enriching or constructive aspects of lifestyle are not likely to be very effective unless they come in some structured format with which the individual can deal. When there is poor self image, and damaged cognitive functioning, it follows that individuals are likely to have low motivation, limited attention span, reduced memory processes and overall, because of these factors, poor learning and adaption. Very often the individual has undergone regression in terms of performance, and that regression will be partly occasioned by injury, but also by poor self image. It may also be caused by the effects of unfamiliar environment in the context of these other factors. Thus there are a number of guidelines we can put forward for structuring the environment:

1) Familiarity of environment. All learning, as far as possible, should take place in environments which are familiar and constructive to the individual.

2) Family members or others, who are going to be with the individual, should have an understanding of the regression process which will likely take place for the individual. He or she will show less mature types of behavior.

3) Individuals are likely to show major variability in performance, and therefore their test results and their performance in learning situations is likely to change rapidly over relatively short periods of time (e.g., possibly during the course of a day). For example, individuals who suffer from depression may show more depressive behaviour in the morning than later in the day. We know that individuals who have damage to the central nervous system may tire more rapidly and are more susceptible to motor tremors and epileptic seizures when fatigue sets in.

This Volume - Approaches and Procedures

In the following articles a number of issues are discussed relating to a wide range of persons with disability. Sharon Robertson underlines some of the important aspects of an ecological approach to counselling and stresses the importance of understanding an individual's social support system. She notes the importance of structure within the environment for effective rehabilitation. Her arguments, taken from a wide range of counselling literature, again underline the importance of emotional factors in aspects of disability. Again they are a recognition of a common concern, and therefore a further example of some principles for dealing with various types of disability. Yet the rehabilitation field in Canada is fragmented. The arguments here are for a more holistic approach and an integration of programming areas and facilities or services directed towards disabled persons. More is to be lost than gained by continuing to advocate only for certain individuals, or to advocate under different classificatory labels. The essential point in this issue is that behavioural programmes and the ecological factors, which play a major role in rehabilitation, must be understood and must be dealt with by skilled workers who have had advanced training, directly through colleges and universities, and hopefully, through a continuous in-service programme which should become mandatory for all workers in this field. The factors which relate to stress are not just concerned with the individual who is disabled, but a family which is undergoing change and therefore probably showing regression effects. Some of the new procedures, which recognize that counselling should not be a linear process, but multidimensional, seek not one answer, but recognize family patterns of interaction and therefore the needs for family support and guidance, with individuals formulating their own resolutions to the challenges.

In James' article the relevance of the unique characteristics of the rural environment as a place of rehabilitation is discussed. It may well be that it is through the rural environment, which does not have ability to provide the same range of traditional resources as urban centres, that the possibility of an integrated model becomes possible. If one follows the arguments in this paper, one comes to the conclusion that we may not require buildings in the same ways as we have done to the present. This will mean some fundamental changes in thinking by charitable support groups, governments and professionals. Delivery of service has to be a process, and it requires, very often from the rehabilitation education perspective, not a place where people go for treatment, but behavioural and social processes which encourage adaption, development and change within the individual's local community and home environment. Johnson provides some more precise examples showing how a counsellor or practitioner works with an individual who has a disability and their family. The paper underlines, quite clearly, the importance of goal setting and programming in context. This does not relate simply to the individual's perceived need, but with the needs as expressed by the individual, modified by involvement of the family and a very skilled counsellor. The selection of goals requiring change and development is an important one. The practitioner may have clear ideas about what is needed, but unless these views are shared by the disabled person, motivation and self image are damaged from the disabled person's perspective.

Borgen and his colleagues have underlined some of the experiences which occur for unemployed physically disabled persons. The process is not different from other types of disability, and the processes that they describe add some depth to the arguments and examples in the present chapter. The work also accents a need to look at other aspects of the individual's needs and lifestyle including an examination of integrated programming beyond employment characteristics. This is not to deny the importance of employment, but to recognize that the individual functions, or does not function, as a whole, and that other aspects of living and enjoyment and satisfaction can be obtained through the development of a wide range of personal processes.

The Segger and Plecas article recognizes the importance of life skills and underlines the importance of social competence skill training. Their work is with a particular group of institutionalized offenders, yet much of what they have to say is an example of the general processes outlined in the first chapter. We should stop thinking about limitations which we imagine are imposed by a specific population, but ensure that work becomes generic and is read, generically, by practitioners in the field, and taught through programmes provided within universities and colleges. We still have programmes in colleges and universities which are labelled by conditions, suggesting that professionals are being trained for one area, where the requirements are different from another area. Even in recent debates in Canada about rehabilitation workers we have not recognized the general nature of our knowledge and experience. We have to rethink the process of rehabilitation practice within the country. The article by Flynn et al. noted the lack of association between disability condition and employment status in their follow-up study. Several of these arguments are underlined most clearly by the article from Michael Holosko, who is not looking at disabled persons, but persons who have difficulties in finding employment. It is of interest that this article gives many examples which are common to the field of disability. It underlines the fact that much of disability is a disability of the environment which has effects on the individual who is not per se a disabled person, and yet the focus of most of our rehabilitation programmes are directed only towards individuals. It is limiting if we just think about rehabilitation processes for the individual or their family without a recognition that changes need to occur within the environment. Thus Holosko's chapter serves notice that once again it would be wise to leave behind some of our classificatory systems and look much more intently at behavioural programming and assessment, and social and ethological arguments about programmes, which change the nature of need amongst individuals.

It is perhaps a truism, but nevertheless important to recognize that as our society becomes more complex, so the range of disabilities will increase. For example, those who cannot master the complexities of the computer world may find themselves disabled individuals! The disability is not the individual, but the problems caused by a changing and advancing society. This is underscored by Flynn, who notes the importance of local validation for assessment tools. Presumably local conditions are a critical factor, not simply the degree of disability.

The work by Groeneweg and his colleagues underlines the importance of evaluating, on a long term basis, the work that we carry out. The monitoring and evaluation processes which they quote on mentally handicapped adults, can be applied, in terms of principle, to other areas of operation. Unless we can evaluate what we are carrying out, preferably on a conjoint basis as has been suggested by Westwood (1986), with all parties involved (including sponsor, host agency and receiver group) having a stake in the design, development and application of the evaluation techniques, it is unlikely that we will modify our programmes as effectively as we might.

Finally, we have to recognize that the programmes that have been developed apply to all ages. In Marlett's article, youth are the particular concern, but in one sense we are all in transition and it is important to underline the importance of social action processes and the relevance of, not just providing programmes for individuals, but recognizing that disabled persons must decide what is necessary, and what they would like to work on, in terms of goals and needs. If we can change our attitude towards clients and see them as partners in a process, as people whose needs and perceptions of handicap are important, so we will begin to function differently as professionals in the field. Methods are provided by Marlett for setting up counselling sessions to deal with such situations.

Conclusion

This volume is about some general principles of rehabilitation with specific examples. It is suggested that there is an area of rehabilitation education which involves a range of behavioural and social counsellors and practitioners, who need to have a knowledge of techniques, but also a recognition that a wide variety of individuals can be served by these processes. Part of the argument lies in not simply doing things to individuals, but seeking out individual concerns and working in a team with the individual who has the disability. Often, because rehabilitation is a long term process, and physical damage and attitudes in the community produce negative effects to self image and motivation, certain degrees of rehabilitation structure are required. Part of rehabilitation skill is to know when to apply structure and when to open the doors to more imaginative and personal means of directing one's own rehabilitation programme. To gain this knowledge a flexibility to develop and apply such programmes must be our own goal for rehabilitation.

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SOCIAL SUPPORT AND ITS IMPLICATIONS FOR COUNSELLING DISABLED PEOPLE

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Introduction

In recent years, increasing attention has been directed to the study of social support, its relationship to overall health and well-being, and its function in times of crises. Consistent with an ecological approach to counselling, an examination of an individual's social support system has implications for interventions at both an individual and an environmental level. Such an approach is consistent with efforts to promote the psycho-social functioning of the disabled person as advocated by many within the rehabilitation field (Dunham & Dunham, 1978; Goldenson, 1978(a); Stubbins, 1977; Vargo, 1979). This paper will focus on various aspects of social support and social support systems. More specifically, consideration will be given to (a) some early formulations of social support, (b) current conceptualizations of social support, (c) social support as it relates to the disabled; (d) assessment of social support; and (e) strategies for intervention. Following a summary, a number of practical recommendations are provided.

Early Formulations

Three men, Gerald Caplan, John Cassel, and Sidney Cobb, individually made a significant contribution to the study of social support and the influence of their work can be seen today. Each of their formulations is presented here.

Caplan's Model

As early as 1964, Gerald Caplan, a social psychiatrist, presented a conceptual model for the primary prevention of mental health problems which revolved around a theory of crisis and factors which influence crisis outcome. Central to his model was the role of significant others in maintaining the psychological and physical integrity of the individual over time.

Influenced by Erikson's (1959) theories of developmental and accidental crises, Caplan believed that during the lifespan, individuals are faced with both short-term crises and transitions as well as long-term challenges, stresses, and privations which require adaptive competence. Both biological and role-transitions (e.g., birth, puberty, illness or death of a loved one, personal illness, accident, or a surgical operation, entry into school, transfer to high school, leaving school, finding or losing a job, getting married, becoming a parent, retiring) represent risk because they involve a loss, the threat of such a loss, or a challenge. Both involve cognitive and affective upset and require that adjustments and adaptations be made in the face of novel situations or seemingly insoluble problems. During these crisis periods, a person may succeed in mastering the distressing experience and emerge stronger and better able to deal effectively in the future not only with similar stresses but with other difficulties as well, or he/she may deal with the problems in a maladaptive manner and emerge less healthy than before the crisis began. Whatever the outcome, the new pattern of coping worked out in dealing with the crisis becomes an integral part of the individual's problem-solving repertoire and increases the chances of dealing more or less realistically with future crises.

Significant members of one's primary social group (i.e., close family members and friends) are influenced by changes affecting an individual member and, at the same time, are influential in affecting the crisis outcome. A well-organized group, in which the system of authority is clear and acceptable, communication is open, and the roles of members mesh in a comptementary way, will exert more control, give more support, and reduce conflict about how to handle the problem. It will also provide reassurance and comfort as well as outlets for expressing and mastering negative feelings (e.g., shame, anxiety, guilt, anger, sadness) which inevitably accompany crisis. At the same time, it may refer to external sources or agencies for help. On the other hand, a family or other primary group might impede the healthy resolution of the crisis by avoiding or denying the problems, ignoring the emotional needs of the individual and thereby increasing anxiety and hostility, or by being unable to recognize or generate adequate alternate means of coping. Since family, friends, and other informal helpers are likely to be the ones to whom one turns and, thereby, to influence the crisis outcome for better or for worse, Caplan held that interventions should be directed not only toward the individual in crisis but also toward the family and other primary group members in order to become more effective.

The Work of Cassel and Cobb

Later, two epidemiologists, John Cassel and Sidney Cobb, became interested in understanding why some people were unable to withstand stressful life experiences and became ill, while others were able to mobilize the resources necessary for healthy adaptation. Following extensive reviews of the literature, they concluded that people who experienced high levels of stress in the company of others or with the knowledge that they had access to supportive social ties did not develop the poor health experienced by those who were relatively isolated or felt unsupported.

According to Cassel (1974), psychosocial processes trigger off responses in terms of the information they are perceived to contain. When, in stressful situations, they consist of "feedback conveyed in signs and signals from primary group members, that correct deviations from course at behavioral, cognitive, and emotional levels" (Gottlieb, 1983, p. 21), they serve a supportive or protective function, buffering or cushioning the individual from the physiologic or psychologic consequences of exposure to the stressor situation. On the other hand, when one receives inadequate feedback that one's actions are leading to desirable and/or anticipated consequences, vulnerability is increased. Thus, Cassel's formulation of social support emphasized the importance of obtaining feedback from primary group members while the individual is undergoing a potentially stressful experience. Rather than try to reduce the exposure to the stressor, he advocated the improvement and strengthening of social supports.

An alternate view was provided by Cobb (1976). Cobb conceived of social support as information leading a person to believe that he/she is cared for and loved (emotional support), is valued and esteemed (esteem support), and/or is a member of a network of communication and mutual obligations. Cobb stressed that it is information rather than the provision of goods and services or the conduct of activities that is central to his concept. Further, the individual's perception of the information determines whether or not it is supportive rather than the information itself. In this sense, Cobb's conceptualization of social support was both cognitively and phenomenologically-oriented (Gottlieb, 1983). Because of the importance of its health-protective effects, Cobb urged that all people be taught how to give and receive social support.

Caplan's Modified Views

Incorporating Cassel's (1974) ideas about the importance of receiving adequate feedback from one's primary social group and building on his earlier model, Caplan (1974) defined social support systems as "continuing social aggregates (namely continuing interactions with another individual, a network, a group, or an organization) that provide individuals with opportunities for feedback about themselves and for validation of their expectations about others, which may offset deficiencies in these communications within the larger community context" (1974, p. 4). The main characteristic of those social groups that act as a buffer against disease is that members are highly regarded within the system as unique individuals with personal needs which are considered to be worthy of respect and satisfaction. Members tell one another what is expected, provide guidance, monitor performance, reward periodically, and reprimand as needed. As such, they perform the social comparison function associated with reference groups. According to Caplan (1974, p. 6) supports are likely to consist of three elements: "the significant others help the individual mobilize his psychological resources and master his emotional burdens; they share his tasks; and they provide him with extra supplies of money, materials, tools, skills, and cognitive guidance to improve his handling of the situation." They may also act as a refuge or sanctuary to which one can retreat to rest and recuperate from outside stresses.

Although the most common support system in all societies is the marital or family group (Caplan, 1976), Caplan believed that many professionalized and formal community institutions as well as natural systems (nonprofessionalized and informal social units, particularly mutual-aid organizations and person-to-person caregiving efforts, both spontaneous and organized) can be parts of support systems. Killilea (1976) gives examples of many mutual help groups (e.g., Weight Watchers, Alcoholics Anonymous, Widow-to-Widow, La Leche League). Included among these are groups for coping with long-term deficits and deprivations (e.g., mutual help groups of stutterers, paraplegics, ostomates, mended hearts, laryngectomies, mastectomies, and groups for relatives of patients with Alzheimer's Disease).

Peer-oriented helping networks include peer counselling, children teaching children, and elders helping elders. Caplan (1974) suggested that neighbors with similar needs and complementary resources might be linked so that together they could provide whatever human services they collectively require (e.g., Neighborhood Watch, Block Parents, car pools, communal living). Consistent with his model, Caplan stressed the need for professionals to foster such informal helping and to actively facilitate the organization of mutual help groups so that they would eventually become self-sustaining.

Current Conceptualizations

Since the time of the original formulations cited earlier, extensive work has focussed on understanding the nature and content of social support, the characteristics of social support networks, as well as the mechanisms by which social support operates. Each of these aspects of social support is considered here.

The Content of Social Support

Not unlike Caplan (1974), Kahn and Antonucci (1980) defined social support in terms of three A's: affect, affirmation, and aid. Support might involve the expression of caring and emotional intimacy (affect), the provision of information about the rightness or wrongness of one's actions or thoughts (affirmation), and the availability and use of direct help through money, time, effort, and the like (aid).

Gottlieb (1978) collected data on how ordinary people view support and developed a classification scheme of informal helping behaviours based on them. Supportive behaviors were divided among four classes: (a) emotionally sustaining behaviors, (b) problem solving behaviors, (c) indirect personal influence, and (d) environmental action. Gottlieb's content analysis contributed to the movement toward greater specificity in defining social support by providing operationalized descriptions of helping behaviors which formed the basis of many of the recent assessment tools.

Integrating previous work, and providing a balance between comprehensiveness and specificity, House (1981) provided a multifactor conceptualization of social support. He referred to social support as an interpersonal transaction involving one or more of the following: (a) emotional concern which involves caring, trust, and empathy; (b) instrumental aid which includes provision of goods and services; (c) informational support which involves giving information or teaching a skill which can provide a solution to a problem; and (d) appraisal support which involves information that helps one evaluate personal performance. House believed that these categories should not be seen as independent entities but rather as interrelated components.

Later, Gottlieb (1983) stated that "social support consists of verbal and/or nonverbal information or advice, tangible aid, or action that is preferred by social intimates or inferred by their presence and has beneficial behavioral effects on the recipient" (p. 28). He stressed that social support is "an ongoing interdependence between people: mutuality is its cornerstone" (p. 28). This focus on mutuality is reminiscent of Cobb's idea of social support provided through a network of communication and mutual obligation. It should be noted that, here, Gottlieb not only focussed on what is offered or is available, but also emphasized the importance of the effect on the recipient. As pointed out by Caplan earlier, an individual's interactions with others can have both beneficial and conflictual effects. Only those which are beneficial should be considered supportive.

Most recently, in an obvious integration of the work of others, Cohen and Wills (1985) described four support resources:

1) Esteem support (information that a person is valued and accepted - often called emotional or expressive support);

2) Informational support (assistance in defining, understanding and coping with problematic events - often called advice, appraisal support, or cognitive guidance);

3) Social companionship (spending time with others in leisure and recreational activities - belongingness);

4. Instrumental support (provision of financial aid, material resources, and needed services - also called aid, material support, tangible support).

Although these four types of support can be separated conceptually, according to Cohen and Wills (1985), they are not usually independent (i.e., more instrumental and esteem support is likely to be available to those who have more social companionship).

Most commonly then, social support is thought to consist of a number of interrelated types: (a) emotional support or esteem support; (b) instrumental support or tangible aid and services; (c) informational support or cognitive guidance; and (d) social companionship. Implicit in most conceptualizations of social support is the idea that one is part of a reliable alliance in which there is a genuine concern for one's well-being and in which certain people and resources would be available, if needed.

Social Support Networks

Closely linked to the study of social support is the notion of the social network. According to Saulnier (1982), each person is embedded in a social network which consists of all the social contacts one has. Social support arises from interaction in this social field. However, social networks are not necessarily supportive. They may be supportive, destructive, insignificant, or merely innocuous. Only that subset of persons in the individual's total social network who routinely provide social support is referred to as the social support network or social support system (Thoits, 1982). Gottlieb (1983) argues that "there is no such thing as a support system; rather individuals are embedded in a social network composed of close associates who are important in the individual's affective life and who generate both support and stress at different times and in response to different life demands" (p. 29). Thus, social support is not static and transactions with the same individual within one's social network at one time may be supportive and at another time may be conflictual.

It is possible to study social networks in terms of both their structural and functional properties. Structural network characteristics refer to those that describe the existence of relationships in quantitative terms (e.g., size, composition, density or degree of connectedness, accessibility, frequency of contact, stability, homogeneity, geographic dispersion). Structure is important as it may have a powerful influence on the flow of supportive resources to an individual (Thoits, 1982). On the other hand, functional network characteristics refer to the extent to which particular resources (e.g., emotional support, information, material aid) are provided, required, or withheld. Thus, functional network characteristics deal with the frequency, amount, adequacy, and quality of support received from various support system members.

The quality and intensity of obligation incurred or acquired in any exchange (reciprocity) is another functional variable to be considered (Hurd, Pattison, & Llamas, 1981). It should be noted that the degree of support provided by networks is not necessarily the same as the degree of perceived support. Perceived social support relates to the extent to which an individual believes that his/her needs for social support are fulfilled (Procidana & Heller, 1983). There is ongoing debate about the importance of examining quantitative versus qualitative aspects of support as well as perceived support versus the support provided.

No single network is suitable for all stages of the lifespan; rather networks of differing sizes, density, and composition appear to be appropriate in differing situations. There is a growing body of evidence linking isolation or a lack of confiding relationships with various forms of psychopathology. Further, various factors (e.g., long-term illness) may tend to diminish network size, although the quality of support can remain high. It appears that dense and loosely-knit networks fulfill different needs with both very low and very high density networks being relatively dysfunctional. Dense clusters within a network appear to provide for emotional needs, while a more loosely-knit structure with interconnecting ties can supply a range of information and support for changing identities. An extremely dense network may "bind" the individual, while an extremely sparse network may not provide the bonds required to provide a sense of belonging. Various types of structural forms may be differentially appropriate throughout the life span. In times of loss, a dense, emotionally supportive network may be most satisfying, while in times of re-orientation, a loosely-knit structure of relationships with more variety and far-reaching ties may be more adaptive. Neighbours and friends are usually relied on for services, emergencies, and short-term difficulties while relatives are sources of financial and long-term assistance. Types of social support vary not only with the specific challenge an individual faces, but also with the stage within the particular crisis period (Saulnier, 1982). In examining an individual's social support network, it is important to keep these factors in mind.

Social Support Mechanisms

A major unresolved issue in the ongoing debate about social support and its influence on health revolves around the mechanism by which it operates. Although many studies have provided evidence of a relationship between support and well-being, this result could occur through two very different processes. One model proposes that social support has a direct effect on health and well-being and therefore, is beneficial on an on-going basis, regardless of whether or not a person is under stress. The alternative indirect effect model posits that support is related to well-being only or primarily when an individual is under stress. This is called the "buffering" model because it assumes that support protects people from the potentially pathogenic influence of stressful events. Although arguments may be made in favor of either model, Gottlieb (1983) has advanced a model in which both the direct and the buffering effects of social support are possible.

Arguments in favor of the generalized beneficial direct effect of social support gain support from two sociological perspectives: symbolic interactionism and Durkheimian anomie theory (Thoits, 1983). According to the symbolic interaction tradition, self-evaluation and social identities originate in social interaction. Because social support helps to enhance or maintain self-esteem and social identity, it would be expected to have a direct effect on one's psychological state. According to Durkheimian anomie theory (Durkheim, 1951), psychological well-being is maintained by social integration. Members of socially cohesive groups gain a sense of certainty and purpose in living by conforming to expected, stable rules of conduct (norms). Thus, the individual is protected from the uncertainty and despair that lead to disordered functioning. A generalized beneficial effect of support on well-being could occur, then, because large social support networks provide regular positive experiences and a set of stable, socially rewarded roles, a sense of predictability about one's life situation, and a recognition of self-worth. Integration in a social support network could also help one avoid negative experiences such as legal or financial problems that would otherwise increase vulnerability to psychological or physical disorder.

Arguments favoring the buffering or protective effect of social support are based on the idea that stress arises when one appraises a situation as threatening or otherwise demanding and does not have an appropriate coping response. Support may intervene between the stressful event (or the expectation of that event) and a stress reaction by weakening or preventing a response based on an appraisal of the situation as being highly stressful. In other words, one's appraisal of the potential harm posed by a situation may be lessened and/or one's perceived ability to cope with imposed demands may be increased if one perceives that others can and will provide the required resources. In a similar vein, adequate support may intervene between the experience of stress and the onset of a pathological outcome by reducing or eliminating the stress reaction or by directly influencing physiological processes. By offering a solution to the problem, by decreasing reactivity to the perceived stress, or by facilitating healthy behaviour, support may alleviate the impact of the stress appraisal (House, 1981).

Although considerable evidence has been accumulated to support the buffering hypothesis, Thoits (1983) argued that this research suffers from serious conceptual flaws and that more attention should be given to the study of the direct effect hypothesis. In a recent effort to clarify whether the positive association between social support and well-being should be attributed more to a direct effect or to a buffering effect model, Cohen and Wills (1985) conducted an extensive review of studies of informal support systems (e.g., family, friends, or coworkers) and symptoms of psychological or physical distress. They concluded that evidence to support each model is available depending upon the type of measures of social support used in the study. Evidence for the direct effects model was found when the support measure (usually using multiple structural support items) assessed a person's degree of integration into a large social network. Evidence for the buffering model was found when the social support measure assessed the perceived availability of interpersonal resources that are responsive to the needs elicited by stressful events. Studies that used support instruments which tapped esteem and support functions were consistently successful in providing evidence of the buffering process. Although the literature provided little direct evidence for the notion that people with specific stressors would be best protected by supportive functions that provide stressor specific coping resources, further research in this area is needed. Cohen and Wills (1985) concluded that "both conceptualizations of social support are correct in some respects, but each represents a different process through which social support may affect well-being" (p. 310). Evidently, embeddedness in a social network is beneficial to well-being but not necessarily helpful in the face of stress when specific resources are needed. Such a result is consistent with the model proposed by Gottlieb (1983).

Social Support and disabilities

The field of rehabilitation is a broad one indeed. Goldenson (1978b), in the introduction to his handbook on disability and rehabilitation, defines a disability as "any chronic physical or mental incapacity resulting from injury, disease, or congenital defect" (p. xvii). Such disparate conditions as cystic fibrosis, mental retardation, hypertension, mental illness, diabetes, and orthopedic disorders fall under the "disabilities" rubric. An extensive review of the relation of social support to each type of disability is certainly beyond the scope of what can be considered here. Nevertheless, a very brief summary of the most salient aspects of work pertaining to psychological disorder and physical disability will be provided.

Social Support and Psychological Disorder

During the past five years, the pervasive relationship between social support on the one hand and psychological disorder on the other has been actively documented (Cohen & Wills, 1985; Gottlieb, 1983; Leavy, 1982; Saulnier, 1982). Following a review of research on this topic, Leavy (1982) concluded that the social supports among clinical populations differ significantly from those among non-clinical populations in that the support systems are smaller, they emphasize non-family ties, and they are more one-sided than reciprocal (at least among disturbed populations). Similarly, Saulnier (1982) suggested that smaller networks are characteristic of people exhibiting various forms of pathology but the emphasis on kin/non-kin ties varies according to the type of disorder. The presence of a close, intimate, and confiding relationship (primarily with a husband) seems to mitigate against the onset of depression in women under stress. The impoverished social networks of schizophrenics appears to consist primarily of family members and could be viewed as "binding". Among neurotics, there are few connections between various members of the support system. Members of abusive families tend to be isolated, having little or no relief from child care responsibilities.

A number of implications arise from the work on social support and psychological disorder. Since the client's social network can influence the course and outcome of treatment, an assessment of the social milieu should form a integral part of the overall assessment. Such an assessment would identify the range of available support resources, the emphasis given to various sources of support, the degree of reciprocity involved, the balance of support to stress in ongoing transactions with each network member, and the ability of the individual to develop, nurture, and use supportive ties. Gottlieb (1983) also suggests that network members' attitudes and behavioural responses to the treatment process itself should be monitored. Such an assessment could be conducted during the initial interview, periodically during the course of treatment, again at termination, and at follow-up.

Various forms of network intervention aimed at restructuring the network and improving communications among members (e.g., family therapy or network therapy) in order to reestablish stability and reciprocity might be used. Alternatively, some strategies might focus on strengthening relationships with certain network members while others might emphasize the building of extra-family links through avenues such as mutual aid groups or psychoeducational programs. Recent moves toward the deinstitutionalization of chronic patients have met with mixed results and as Gottlieb (1983) notes, careful attention should be given to the structuring of social ties and the provision of adequate informal support to chronic patients living in community based facilities.

Social Support and Physical Disabilities

The value of social support as a means of decreasing vulnerability to physical disease and disability and of facilitating recovery from illness has been the subject of study for some time. Having reviewed the evidence that supportive interactions are protective against the health consequences of life stress, Cobb (1976, p. 300) reported:

> "It appears that social support can protect people in crisis from a wide variety of pathological states: from low birth weight to death, from arthritis through tuberculosis to depression, alcoholism, and the social breakdown syndrome. Furthermore, social support may reduce the amount of medication required, accelerate recovery, and facilitate compliance with prescribed medical regimens."

Psychosocial needs and the influence of patients' networks on adaptation to various illnesses have been examined: Both Doehrman (1977) and Gottlieb (1983) reviewed work on cardiac patients; Dushenko (1981), Hymovich and Baker (1985), and Patterson (1985) reported on cystic fibrosis; Johnson (1980) and Hauser, Jacobson, Westlieb, Bunt, and Wentworth (1985) discussed juvenile diabetes; Gottlieb (1983) and Meyerowitz (1980) focussed on breast cancer; and King (1980) looked at asthmatic children. Following an extensive examination of studies of social support to assess its impact in promoting recovery from acute illness and coping with serious physical illness and injury such as asthma, hypertension, stroke, coronary disease and myocardial infraction, cancer, mastectomy, and orthopedic disability, Di Matteo and Hays (1981) suggested that social support may, in fact, be associated with recovery and coping. However, they cautioned that there were limitations in the research and that the social environment could have beneficial and/or harmful effects on patient recovery. Furthermore, although social support is thought to have important functions in buffering to ease the physical and psychological consequences of illnesses (Saulnier, 1982), according to Cohen et al (1985), the mechanisms through which it is related to outcomes of serious physical illness remain to be clarified.

According to Cohen and Lazarus (1979), almost all serious illnesses threaten the individual to some extent. The imposed threats usually consist of threats to life itself, threats to bodily integrity and comfort, threats to self-concept and future plans, threats to emotional equilibrium, and threats to the accomplishment of customary roles and social activities. There are also the threats associated with the need to adjust to a new physical or social environment. While different types of illnesses and medical interventions arouse different needs for adjustment, the threats themselves cross individual illness boundaries.

Vargo (1978) described a number of sequential stages (denial, hostility, and depression) which physically disabled persons typically experience before achieving a measure of psychological adjustment to a disability and noted the need for counsellors to be skillful at implementing strategies which are compatible with the intra- and interpersonal dynamics of each stage. Similarly, Gottlieb (1983) noted that patients with heart ailments and women who have developed breast cancer face a common set of psychosocial adjustment challenges one of which is grappling with the long-term threat to their health and the concomitant emotional reactions, usually anxiety and depression, which they experience. Other psychosocial adjustment challenges include (a) developing new patterns of living to accommodate their changed physical health status; (b) contending with the reactions of their families and social intimates whose coping strategies may be at odds with their own in that network members typically are either overprotective or too demanding during the recovery process; (c) coming to terms with changes in their self-perceptions and regaining their self-esteem; and (d) overcoming concerns about their attractiveness and their capacity for physical intimacy arising from the disfigurement of mastectomy and the enforced reduction of activity among post coronary patients. These adjustment challenges are not usually dealt with by medical care staff and fall to the patient's primary social network (usually the family) at discharge from hospital.

The potential beneficial effects of social support in recovering from serious illness or injury have been outlined (Di Matteo et al, 1981). Tangible social support such as financial help, running errands, and child care tend to be highly valued when one is ill. Tangible social support may help to reduce the ill person's pain, tiredness, and worry and may also make it easier to comply with therapeutic regimens. Reactions of others may help the ill person assess the threatening quality of a situation and to gauge his/her own level of arousal. Physically ill or disfigured persons in particular look to others for validation of their own personal value and worth and for feedback about their behavior thereby affecting self-image and self-esteem. The social network may also provide an opportunity to discuss feelings, express emotions, and develop intimacy during times of illness. Further, those who are close to the disabled person may have the most influence in changing his/her attitudes and behaviors particularly as it relates to compliance with medical regimens that require a difficult change.

As noted many times previously, social networks can have a detrimental effect on individuals and this is no less true in the case of recovery from physical illness. Serious illness or injury to one family member can put undue stress on the others having negative effects on the family equilibrium (Di Matteo et al, 1981; Hymovich et al, 1985; Patterson, 1985; Vargo, 1979). If the disabled person received too much attention, the resources of the other members of the family system may gradually become depleted leading to chronic illness and symptoms, frustrations and interpersonal conflict. The disabled person may be distressed by the "burden" (emotional, physical, financial) that he/she places on others. Members may become disengaged from one another with the accompanying destruction of emotional bonds, if issues of equity and reciprocity of support are not dealt with. The disabled person must learn how he/she can offer support to others. Further, the social network may actually interfere with compliance to prescribed treatment regimens if they go against their values, beliefs, and the usual patterns of conduct of the family.

The way in which social networks may have a detrimental effect on the psychosocial adjustment of cancer patients has been pointed out. Thomas (1978) noted that the coping responses of mastectomy patients and family members were congruent during certain phases of the diagnostic and treatment process and conflicted during others, creating an even greater stress for both parties. During the prediagnostic phase, patient and husband typically deny the possibility of cancer. Later, while the patient copes by denying the seriousness of the situation, family members try to face up to the threatening situation and urge the patient to do so. This clash in coping patterns can leave both parties angry with one another, confused about how to meet each other's needs, and uncertain about the impact of the illness on future family functioning. Supportive interventions must not only address the patient and the family's emotional needs but must also teach both how to give support to one another in a way that does not undermine the coping behaviors that have adaptive value for each (Gottlieb, 1983).

Vargo (1979) and Seligman (1985) noted the need for counselling among families in which a member is disabled. Similarly Doherty (1985), Patterson (1985), and Hymovitch et al (1985) noted that professionals need to educate, support, and encourage families regarding home medical treatment. They need to know the specific coping strategies they use, support those that are effective, and recommend alternatives for those that are ineffective. According to Vargo (1979), families need help to understand and accept a disability, to accept their own feelings, to understand the psychological factors which affect the disabled person's adjustment to the disability, and to redefine the family relationship. Since the degree of social support provided to physically disabled people and their families during the recovery can have a significant impact on their adaption to the disability, more attention should be directed to these factors in the treatment process. The need to offer support to families with members who have other forms of disability (i.e., the developmentally disabled) has been stressed recently as well (Bubolz & Whiren, 1984; Giele, 1984; Kazak & Marvin, 1984; Schilling, Gilchrist, & Schinke, 1984).

Assessment of Social Support

In line with the conceptualizations of social support provided earlier, an assessment of social support can be directed toward gaining information in a number of areas including (a) the structure of the social support network (e.g., size, interconnectedness, density, and accessibility), (b) the nature or content of the support provided, (c) the provider of the support (i.e., family member, friend, professional, stranger), (d) the subjective appraisal of the perceived support, (e) the length of time the support has been available, (f) the activities involved in the provision of support, and (g) the process by which the individual develops, nurtures, and uses supportive ties (Barrera, 1981; Leavy, 1982). Such a multifaceted assessment is intended to examine the content of the available social support, the structural and functional characteristics of the support system, as well as the processes by which individuals make use of these connections. Unfortunately, no single instrument is available to provide such an appraisal. Nevertheless, some informal and some formal procedures may be used to obtain a more comprehensive picture of the network and the social support provided. Not all procedures will be appropriate for all clients, however. In the case of the disabled person, the procedure selected will depend upon the disability and where possible, adaptations in conducting the assessment should be made.

Informal Assessment Approaches

The simplest method of gaining information about a client's psychosocial assets is to ask relevant questions in the course of the counselling interview. Clients should be asked about their families and friends, the nature of each relationship, its potential for supportive or conflicting behaviors, and the perceived adequacy of these relationships. It is important to remember that some researchers (Brown, Bhrolchain, & Harris, 1975) found that simply having a number of confidants is very predictive of client satisfaction with the network. A lack of close ties or a confidant is usually a significant indicator of some form of difficulty. Because of the potential impact of the social network in aiding or abetting client progress, Gottlieb (1983) has suggested that the client be asked questions relating to the network's interpretations of the client's disability, their expectations for treatment, and their reactions to the goals, plans, and methods set up during the counselling sessions. The counsellor can then periodically assess the primary network's response to counselling interventions. Information gained from the interview can be validated or explored further by using a number of other methods.

Two general techniques can be used to identify those with whom the client interacts on a regular basis and to assess the potential of the client's social support network. The first of these involves the use of a journal. Here, the client is given specific instructions about what is to be recorded in the journal (e.g., the name of any person with whom he/she has a conversation, the topic discussed, feelings about the encounter and/or the person, the name of any person who helped to complete specific tasks, and what the person did to help). The journal should be completed on a daily basis and later examined to identify various aspects of the support system.

Several structured activities (Ashinger, 1985; Gottlieb, 1983, 1984) have been developed to guide people through the process of assessing their social resources, explore their perceptions of the types and quality of the support they give and receive, and plan changes that might strengthen the supportive aspects of their lives. In the activity described by Gottlieb (1984), clients are asked to map their primary social networks along certain structural dimensions including size, composition, degree of correctedness (density), and geographic dispersion, and along specific process dimensions including types of helping exchanges, degree of reciprocity in these exchanges, and levels of relational intimacy. In the second part of this activity, clients are involved in assessing the types (Socializing and Companionship, Emotional Support, Advice and Guidance, Tangible Aid, and Esteem Support) and extent of the supportive provisions they exchange with their network members. By first examining the map in terms of structural characteristics (e.g., size, density, and intimacy of relationships) and later examining access to the five types of support, the client and counsellor can then focus on planning changes in the structure and the helping processes of the client's network. Eventually, the client may be directed toward specifying two network/support objectives, and the client and counsellor together may work at outlining practical steps that could be taken to achieve these changes. Logs or diaries as outlined previously may be used to chart the effects of these changes on a daily or weekly basis.

Formal Assessment Procedures

A number of formal methods of assessment of social support are available and will be described here briefly. It should be noted that considerable effort is currently being directed to the development of adequate measurement instruments, as no single instrument adequately taps the many aspects of an individual's support network. Further, these instruments have typically been normed on university populations and do not provide data specifically oriented towards the disabled.

Barrera, Sandler, and Ramsay (1981) used the information from Gottlieb's (1978) content analysis of informal helping behaviors as outlined earlier together with other categories to develop a survey instrument called the Inventory of Socially Supportive Behaviors (ISSB). Respondents are asked to rate the frequency with which 40 behaviorally specific types of aid were extended to them during a fixed time period. The sum of these gives an overall assessment of the amount of support the client has received in the recent past. The inventory is reported to have high internal consistency and adequate test-retest reliability and to be significantly correlated with overall adjustment and symptom development. Barrera (1981) has suggested that the ISSB is a potentially useful measure of the network's mobilization of support. While the ISSB does give a total support score, it does not identify who is providing specific supportive behaviors or provide an appraisal of the adequacy of the support.

For adolescent clients, it is possible to gain information about the providers of support by using the Inventory of Communication Patterns for Adolescents (West & Altmann, 1985). While recognizing that communication is not the whole of social support despite its substantial role in this phenomenon, West et al (1985) argue that an inventory of communication patterns constitutes an essential component of any careful and complete assessment of a client's psychosocial assets. The ICPA identifies the frequency with which the client discusses given topic areas with specific members of the network. It may be used to help identify individuals within the client's network who, with the client's consent, may be enlisted to deal with specific concerns that arise in counselling.

A third available measure of social support is the Arizona Social Support Interview Schedule (ASSIS) (Barrera, 1980; Sandler & Barrera, 1984). This structured interview can be used to assess both support network size and satisfaction with support. The client is asked to provide the first names or initials of people who fit each of six descriptions of supportive functions (talk about private feelings, material aid, advice and information, positive feedback, physical assistance, and social participation) that have been provided during the preceding month. For each type of support, the client is asked to indicate the extent to which he/she is satisfied with it. Part of the interview is also directed toward identification of both conflicted and unconflicted parts of the network.

The Interpersonal Support Evaluation List (ISEL) (Cohen, Marmelstein, Kamarck, & Hoberman, 1985) was developed to assess the perceived availability of four separate functions of social support (tangible, appraisal, self-esteem, belonging) as well as to provide an overall functional support measure. The authors report adequate internal and test-retest reliabilities.

Together, the various measures provide a more comprehensive assessment of a client's social support network and individually they offer a range of possibilities to select from depending upon the type of information needed. The counsellor should give careful attention to selecting appropriate instruments and to understanding what the results mean about the client's social world.

Intervention

Knowledge of the client's level of social support allows the counsellor and client together to make some judgment about the adequacy of support available and to identify specific needs to increase the support being received. Methods of delivering counselling services are affected in that information about the social network can be used to identify systems for change.

According to the circumstances, intervention strategies may be aimed at various levels (Pearson, 1983):

1) The counsellor or rehabilitation practitioner can work directly with the client to improve his/her interpersonal awareness and/or skills as a lack of awareness or skills may be hampering his/her ability to form and maintain supportive relationships.

2) The counsellor can try to increase the responsiveness and/or resources of the client's existing support persons through direct intervention (e.g., by raising their sensitivity

to the client's need for support or by teaching them how to provide support).

3) The counsellor may link a client to a surrogate, as contrasted to natural, support systems (e.g., mutual help groups, self-help groups, crisis intervention teams).

Although the purpose of focussing on each level for intervention is to increase available support resources, there are factors which make one level preferable to another at various times.

Focus on the client takes precedence when adequate informal support resources actually or potentially exist but the client for some reason is unable to access or maintain them. If, for example, the client has been recently disabled, he/she may need help in coming to terms with the disability itself (Gottlieb, 1983; Vargo, 1978). If the client is depressed, he/she may minimize or underestimate the value of the actual support being received (Monroe, 1983) and may need help in coming to recognize and value support which is often overlooked. Since networks are only maintained if members are involved in some form of exchanged support, the client may need help in learning how to offer support to others. The focus, then, is on the client's intrapsychic or behavioral resources and/or issues which act as barriers to accessing and maintaining support. Intensive individual or group counselling may be needed to foster awareness of these barriers and to improve motivation to change while specific psychoeducational programs may be needed to develop requisite skills (e.g., in interpersonal areas). Such interventions may be necessary before other measures can be effective.

Focus on the client's existing support resources takes precedence when improvements or additions to support resources already available to the client are needed. It involves enlisting the help of the existing support network and has the advantage of using and confirming the importance of this natural support system. As noted previously, potential sources of support (e.g., family members) frequently need help to understand the role they can play in adaptation to or recovery from a disability, the way in which they can give support to one another without undermining coping behaviors that have adaptive value, and the part they can take on in promoting compliance to treatment regimens. While trying to enlist the help of natural support system members, counsellors need to be mindful of the needs of non-disabled family members to receive as well as to give support. Sometimes it may be necessary to deal with the entire system via family counselling if all members are willing to work at making changes.

Focus on developing links with surrogate support systems occurs when the natural support system is unable or unwilling to provide needed support for the client. In this case, the client is encouraged to change the structure of the network by building new relationships. If the social network is too inadequate or too conflicted, offering rejection, criticism, harmful manipulation, and misinformation with little possibility for improvement, an out-of-home living arrangement may be necessary. Or, as in the case of the severely physically or developmentally disabled, if the family resources become exhausted with no possibility of adequate outside help, alternate living arrangements may offer needed surrogate support for both the client and the family. In the case of the disabled person, a specific crisis or condition may require specific support which can be acquired from others having the same form of disability (e.g., clients with paraplegia, ostomies, multiple sclerosis). Members of support groups who have gone through or who are going through similar experiences may discuss their reactions and feelings, and share ways of coping with their particular disability. It should be noted, however, that what is considered to be supportive may vary from one group to another. For example, it has been suggested (Gottlieb, 1983) that heart patients welcome the opportunity to attend group sessions to gain information about their illnesses, but they prefer not to disclose their feelings about the emotionally threatening aspects of their illness.

Summary and Recommendations

In his early work on crisis intervention, Caplan (1964) argued that social support could have a positive or a negative effect on crisis outcome and thereby was a critical factor in the maintenance of mental health and well-being. Similarly, Cassel (1974) and Cobb (1976) emphasized the importance of social support in the maintenance of physical as well as mental health. All three argued that social support acted as a buffer, protecting an individual from the adverse consequences of stressful situations. However, their definitions of what constitutes social support differed. For Cassel, it consisted of feedback from primary group members informing the individual that his/her actions are leading to anticipated consequences. For Cobb, it was information leading one to believe he/she is loved and cared for, valued and esteemed, and a member of a network of communication and mutual aid. Caplan's definition includes aspects covered by both Cassel and Cobb. For him, social support consisted of feedback from others which provides emotional support and validation of one's identity, cognitive guidance and help with problem solving, as well as material aid in the form of money, materials, or skills. Thus, Caplan addressed both the feedback and information components of social support while also including the giving and receiving of instrumental and practical aid. Despite their agreement about the need for social support, there was disagreement about whether social support is a uni-dimensional or a multi-dimensional construct, whether it was primarily subjective or perceptual or objective as well, and whether it can be provided only by primary group members or by anyone who expresses concern or caring.

Currently, social support is most commonly identified in terms of a number of interrelated types: (a) emotional support or esteem support; (b) instrumental support or tangible aid and services; (c) informational support or cognitive guidance; and (d) social companionship. Social support networks can be described in terms of their structural characteristics and/or their functional qualities. Networks of differing sizes, densities, and compositions appear to be appropriate in different situations. Furthermore, there is some evidence to suggest that social support has a generalized direct effect on health and well-being. It also seems to act as a buffer in stressful situations.

Recent work on social support and disabilities suggests that social support is an integral part of an individual's psychosocial world such that it has a significant impact on psychological well-being and can influence recovery from and adaptation to physical illness. Family or other significant members of the social network play a critical role in providing or not providing adequate support and are frequently neglected as part of the treatment process. Various methods of assessing social support (some informal and some formal) can be used to enhance client and counsellor awareness of the client's psychosocial world and using this information, interventions can be designed to increase the support available to and received by the client. Such interventions may focus on the individual client, the existing natural support system, and/or surrogate support systems.

A number of recommendations for counselling of people with disabilities can be made on the basis of the work presented here:

1) Work on social support and social support networks should be incorporated into existing models of counselling and helping.

2) An assessment of the client's social support system should form a part of the overall assessment of the client and the resulting information should be used in designing intervention plans. Changes in social support should be monitored on an on-going basis.

3) Interventions should be directed to various parts of the client's psychosocial world in order to affirm, use, and strengthen the social support given and received by clients as necessary.

4) Clients should be helped to overcome their own barriers to accessing available support.

5) Network members' attitudes and behavioral responses to the counselling process itself should be monitored and members should be offered various forms of support as required. Where necessary, members should be taught how to be more supportive to one another.

6) Counsellors and rehabilitation practitioners should develop psychoeducational programs which can offer needed information and support for clients and/or their families.

7) Counsellors and rehabilitation practitioners should actively promote the provision of surrogate sources of support such as peer-help and mutual-aid groups to clients with common disabilities.

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THE REHABILITATION PRACTITIONER: A RURAL PERSPECTIVE

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Introduction

According to the last census statistics, 24.5% of Canadians live in rural environments, that is in areas having a population concentration of less than 1,000 and a population density of less than 1,000 per square mile. Extrapolating from urban statistics, 31% of the population lives in centres of less than 5,000; 34% in centres of less than 10,000 and 41% in centres of less than 30,000 (Harris, 1981). Applying the Health and Welfare Canada (1980) estimated disability incidence rate of 9.8% of the population, some 550,000 disabled Canadians come from rural environments, rising to approximately 760,000 if extended to towns of 10,000 and less. The definition of disability used is based on functional limitations on a range of daily activities, regardless of etiology, and on the utilization of services and programs in Canada. The impact of the rural environment on the provision of rehabilitation services for these individuals is significant. Obviously there is less opportunity to make use of the wide range of services traditionally found in urban settings. The role of the rural rehabilitation practitioner may thus exhibit a variety of functional differences, compared to that of the urban practitioner, in responding to the needs and demands of the disabled in rural communities.

Amongst a sparse population the disabled child or adult may be an anomaly. Whereas traditional approaches to service delivery in urban centres have congregated populations of similarily disabled persons in an effort to offer comprehensive and cost-efficient services rural communities have been unable to provide comparable opportunities. In the past the rural family has had to maintain greater responsibility for the handicapped member. With heightened awareness of the rights and potentials of the disabled, however, the next few years will provide increased supports and creative new opportunities for the practice of rehabilitation in rural areas.

Rural Distinctives

What makes the practice of rehabilitation in rural areas different from that in urban areas? Pragmatically speaking, there appear to be a number of factors which are distinctive of the rural situation, not all of which, however, will apply to every rehabilitation role.

Geography and Distance

Foremost amongst rural factors are the limitations imposed by geography and distance. Rural caseloads are usually smaller due to the time absorbed in travel. Scheduling is of paramount importance. Accommodating rural employment patterns of parents of disabled children and coordinating case conferences involving other itinerant professional staff, for example, can be exasperating experiences. Last minute cancellations of plans due to inclement weather or mechanical failure require personal tolerance and flexibility. The inability to respond spontaneously to situations of need and the extended time lapses between client contacts can be frustrating to itinerant staff. Dependency on others for temporary use of facilities or transportation requirements can also erode the sense of professional independence. Despite such negatives, however, geography and distance often provide an idyllic quality to rural practice. For many the proximity to nature, the absence of the urban masses and the sense of autonomy more than compensate for rural frustrations. Hence, while physical environmental characteristics may differ widely, from coastal inlet, mountain valley, prairie expanse to northern hinterland, they nevertheless impose in common certain organizational dilemmas and operational hazards of concern to the practice of rehabilitation.

Scope and Incidence of Disability

The rural worker must have a broad understanding of disabling conditions. Whereas an urban counterpart may be able to defer to a colleague or refer to another agency, the rural worker is ipso facto the resident expert. A generalist knowledge of physical, mental, social, psychological and sensorial impairment is essential. General caseloads may encompass a wide spectrum of disabilities. Exposure to low incidence abnormalities provides an opportunity to test one's repertoire of skills and knowledge, while at the same time providing the impetus for professional growth. How many workers would be familiar with Prader-Willi syndrome, Thomsen's disease or Friedrich's ataxia without reference to professional resource materials? While agency affiliation may provide some parameters as to clientele and their conditions it rarely offers the opportunity for specialization of caseloads as found in urban agencies.

Range of Ages

Brown, Hughson and Nemeth (1981) point out that newly formed rural-based services might expect to see a wide range of ages represented in their clientele. Older clients who have never had the opportunity for, or who have resisted, displacement from their rural community in order to receive urban services are likely to avail themselves of the chance for new community-based services. On the other end of the spectrum, infants and children who formerly might have been sent to urban facilities and programs are increasingly being retained in their home communities. The present backlog of unmet needs in most rural communities thus encompasses all age groups. Hence, unless the rehabilitation practitioner has a restricted clientele due to agency mandate there will likely be a wide range of ages requiring services.

Level of Functional Abilities

Brown et al. (1981) suggest also that newly formed rural agencies might anticipate their initial clientele to be relatively high in functioning, shifting towards increasingly handicapped individuals in later years. Again, the backlog effect presents a wide range of individuals whose needs have not been met in the past. The higher level developmentally disabled adult is a most noticeable example. Whereas two or three decades ago this individual might have functioned in labour-intensive work, mechanization and labour market economics have resulted in chronic unemployment and subsequently the need for alternative employment strategies. The growing interest in geriatric rehabilitation, often dealing with debilitating physical conditions, might similarily present a clientele with high levels of intellectual ability. By contrast, the trend to deinstitutionalize the more severely handicapped and place them again in their home communities will extend the lower range of ability levels.

Traditional Resource Limitations

The smaller community is unable to provide the range of traditional resources found in urban centres. Many rural workers have coveted the residential options, assessment specialists, day activity programs, sheltered employment options, training programs, continuing education courses, handicapped transportation services, qualified job applicants, medical and allied health specialists, advocacy groups, and colleagial consultations available in established centres. One of the chronic problems associated with rural resource limitations is the urban migration of handicapped people. Brown et al (1981) in their study into the feasibility of community based services for developmentally handicapped persons in the Bow corridor of Alberta found that trainees tended to remain in the urban community where they were trained. This observation held for 15 of 18 rural clients who were trained at the Vocational and Rehabilitation Research Institute in Calgary. James (1982) similarly found that eight out of 11 subsequently employed rehabilitation clients from the Comox Valley had remained in Victoria after training at Goodwill Enterprizes for the Handicapped. On the other hand, the lack of traditional resources has resulted in creative new approaches to the provision of services to the disabled. Baxter (1982) describes one such strategy in rural Newfoundland that was aimed at assisting families with a handicapped member to secure services in their own community. Importantly, the Newfoundland experience was based on the development of the resources that exist in every community, rather than the importing of outside professional assistance. Utilizing the skills of a resident couple, parents of a handicapped child, and following the principle of normalization the project pursued its goals in four major ways: public education, advocacy, parent support and liaison with professionals. Baxter reflects, "there is every reason to predict that the Newfoundland strategy may turn out to be the most effective one in Canada." Hence the limitation of "traditional" resources in the rural environment may well be the catalyst to the development of dynamic new alternatives in the provision of human services. The recent developments in deinstitutionalization and the emphasis on community living will require added creativity and resourcefulness on behalf of rural rehabilitation practitioners in the immediate future.

Pride to Self-sufficiency

Baxter (1982) cites the "Newfoundland tradition of family pride in self-sufficiency" as the foundation upon which community competency was built. The author's experience suggests that pride in self-sufficiency is perhaps a more generic characteristic of all rural populations. In some cases the stigma of requiring help or the fear of community scrutiny may well contribute to an individual lack of awareness of resources and to lower expectations for disabled family members. The same pride that can veto urban migration for training, however, can be harnessed, as in the Newfoundland example, to create new options within the rural community. Wiste (1978) describes how Oyen, a small Alberta community of one thousand "struggling to remain viable in the current migration to urban areas," began to engage in the process of community problem solving with respect to service needs. She concluded that there is a need to "look to the community as a whole for help, rather than continuing to exist as separate entities casting aimlessly for solutions" (p. 12).

Community Involvement

From the author's experience there seems to be a greater opportunity for, and expectation of, citizen involvement in rural community affairs. Individuals trained in urban centres and familiar with urban organizational and political structures are often enticed into rural leadership roles. Thus there is the potential for high visibility within the local community. Such involvement, however, has both its advantages and disadvantages. In the past many social service agency workers have used rural positions as career stepping stones, getting a foot in the door and gaining experience necessary for eventual transfer to more desirable urban opportunities. Informal community involvement was viewed as short-term, often laden with personal agendas. Increasingly, however, rural positions are attracting professionally trained workers who are opting for long-term committment to a rural lifestyle. Community involvement under the latter circumstances may suggest a different set of interests and commitments. Whatever the circumstance, the opportunities reflect community needs. Invitations for involvement may range from informal consultations and advocacy to more formalized agency advisory roles, board level service and even civically elected positions of responsibility. The implications of some of the formal and informal roles that the rehabilitation worker might be expected to assume in many smaller communities will be looked at later in this paper.

Service Characteristics

Delivery of rural rehabilitation services is influenced by the distinctives cited above. The following characteristics, although not unique to the rural environment, do provide a different service orientation.

Itinerant Nature

Due to the sparcity of population and low prevalance of disabilities services must frequently be delivered by itinerant personnel. Rehabilitation consultants with the Ministry of Labour in British Columbia, for example, operate on a regional basis, covering geographical areas comprising of a number of school districts. National organizations such as CNIB have established urban centres for provincial operations but similarly offer itinerant services to rural blind persons. The frequency of such itinerant services are usually a function of the distance from the urban administrative centre.

Home-centred

Rural services are often home-centred. While urban centres may have options of school-based, centre-based, hospital-based or integrated programs at various levels, rural rehabilitation practitioners are increasingly utilizing the home as the centre for service provision. In years past the rural home may have provided a protective, custodial environment; today it can become a centre for developmental education or health care delivery. Shipe (1984) in discussing early childhood intervention programs points out that the home-based programs are particularly important with widely dispersed populations. With infant stimulation programs, "typically the home is visited periodically by a home trainer/tutor, or toy demonstrator (the titles vary) bringing activities with which to engage the child" (p. 18). The strength of home training models lie in their potential for involving the caretaker in service provision, whether this be a parent of a developmentally delayed pre-schooler or the spouse of a newly diagnosed elderly diabetic. They have the advantage of the familiar environment and the immediate support of loved ones. Rehabilitation practitioners become trainers, monitors, facilitators and resource people when delivering home-based services.

Innovative options

At a direct service level rural problems frequently require innovative solutions. Stymied by a lack of service options practitioners must create opportunities which may not have been tried locally before. The lack of independent living options was addressed by the Community Living Skills Program in Courtenay by renting a large travel trailer situated on a private farm. Arm's length supervision was supplied by the owner while creating a structured transition to independence for a mentally handicapped young man. The cost was reasonable and with the support of an itinerant trainer the young man was given the opportunity to take greater responsibility for his own affairs. In the same community the recreation association has attempted to deal with the integration of mentally handicapped person into community and recreational activities through a Leisure Friends Program, pairing disabled persons with volunteer friends. Many times structured recreation services and programs for the handicapped are not viable in smaller communities hence the greater emphasis on informal leisure pursuits in the context of friendships have particular appeal.

It should be noted that innovative programming is not restricted to individual client services. A unique North American experiment in transportation, for example, is underway in Newfoundland. With the support of Transport Canada, Terra Transport's Roadcruiser Service across the province now caters to wheelchair users and others with difficulty climbing steps, enhancing transportation accessibility to the rural disabled. The bus is equipped with a lift and space for two wheelchairs inside (CARP, 1985, p. 13). The Open House Canada program is another example of a federal initiative that has facilitated opportunities for disabled young people from rural areas to exchange visit with young people in other parts of the country. While not solely for disabled students or rural schools the project has been innovative in accommodating the needs of disabled persons through additional escorts and special billeting arrangements. The program was used creatively for a rural group of mildly mentally handicapped teenagers from Vancouver Island, some of whom had never previously been off the island, by a teacher wanting to promote personal development and teach social studies concepts through an exchange with a southern Ontario town.

Short-term solutions

Two important dynamics contribute to the short-term nature of some rural services. Firstly, due to the shifting nature of some populations the need for specific services may be temporary. Transience is part of the Canadian way of life, encouraged by such events as community economic adversity, employment transfers and seasonal employment patterns. Unique child service needs, for example, may be acute for only a short period of time as dictated by family mobility. The second dynamic is the short-term nature of funding initiatives. Being subject to political policy directions and annual fiscal management procedures there is seldom any guarantee of longevity for program funding. This is most obvious in the area of employment where the disabled are frequently targetted in provincial and federal work initiatives.

Close to nature

The idyllic quality of being in a rural environment for the practitioner often translates into a therapeutic quality for the rehabilitation client. An outstanding foster home for troubled teens in Black Creek is situated on a farm where their charges have the discipline of doing outside chores and at the same time the benefits of relationships with animals, the woods to explore and the pond for skating. Many rural employment and work activity options similarly reflect a closeness to nature. Tending plants in a greenhouse, picking vegetables on a farm or doing contract work in the oyster industry may have intrinsically rehabilitative qualities. MacLean (1984) cites the case of Bill, a 50 year old moderately mentally handicapped man who had lived all of his life on a Prince Edward Island farm and who upon the death of his parents was placed in a city group home with concurrent placement in a sheltered workshop. He was soon considered to be severely handicapped and a behaviour problem. It was not until several months later that it was discovered that Bill had a great deal of agricultural knowledge. He was not severely handicapped when seen in a rural context. Bill had not adapted well to assembly line methods and group home living. For some the closeness of interior work environments, the artificial lighting, the constant noise of machinery or the harangue of others can be very counter-productive.

The rural distinctives outlined at the beginning of this paper and these suggested service characteristics are important for an understanding of the context of rural rehabilitation practice. The balance of this paper will deal with some job role implications and preparation for rural practice.

Some Common Roles

The development of the rehabilitation practitioner's role in Canada is taking a different course from its American counterpart. Whereas Stubbins (1982) sees American graduate programs in rehabilitation counselling as producing "indefinable hybrids," it is precisely this transdisciplinary versatility of new Canadian programs which caters to the needs of the rural situation. Normalization in rural communities demands attention to not only the vocational placement needs of a client, but also to concerns relating to independent living, transportation, social relations, mental health, continuing education and leisure activities. Stubbins is critical of the varied roles of "vocational diagnostician, psychotherapist, change agent, community psychologist and social reformer," while equating success in vocational rehabilitation with job placement. Some recent Canadian developments in rehabilitation, on the other hand, do not over-emphasize the vocational component, and hence the job placement function, nor the therapeutic role growing out of American psychotherapy. Rather rehabilitation is seen in terms of a wholistic continuum, encompassing a cradle to grave perspective. The Rehabilitation Services Program of Mount Royal College and the Rehabilitation Studies Program of the University of Calgary, for example, offer transdisciplinary training for rehabilitation practitioners who are ultimately employed in a wide range of social service areas. One might expand Stubbins' list to include consultant, advocate, educator, counsellor and placement officer in formulating a primary list of rehabilitation roles in Canada. Such job role versatility requires appropriate personal qualities, clinical and interpersonal skills, creativity and resourcefulness in addition to theoretical knowledge and experience. While there are numerous rural agencies which might employ rehabilitation specialists the formal and informal requirements of the jobs suggest four main roles which practitioners may have to play.

Public Servant

Historically the rural rehabilitation specialist has most often been a public servant employed by a provincial or federal department of government. Hence, legally and practically, the worker is a representative of government authority. To the extent that there are matters of protection, custody or financial support involved the state relationship may be quite explicit. On the other hand, the rehabilitation worker is trained as a direct service provider and primary client concern is implicit in all relationships. This dichotomous position can be a potential source of internal and external conflict. Ritchie (1982), in discussing the rural mental health worker as a public servant, claims that public sector mental health professionals have been faced with ethical dilemmas as a result of the conflicting expectations of professional standards and bureaucratic regulations. As many rehabilitation workers are aligned with the same professional associations as mental health workers similar ethical dilemmas can be expected to occur. While such conflict is not unique to the rural public servant it is potentially more imposing as rehabilitation workers assume any or all of the following adjunct roles.

Private Practitioner

Most rural communities cannot support a private rehabilitation specialist, consequently private services are usually delivered on a part-time or itinerant basis. Frequently such services are offered by social services professionals already employed as public servants. The fact that client contact time might be provided after regular business hours or on weekends may present some difficulties in communicating with other professionals, however it might also be a convenience for many rural families who cannot afford to take time off from employment to travel long distances for appointments. Public servants practicing privately must be wary of conflict of interest charges, particularly in the manner in which they obtain their referrals and in the duplication of services provided. Although private services have been formerly limited in scope, e.g. a psychologist offering psychological assessment but not vocational assessment, or a social worker offering counselling but not psycho-therapy, they have nevertheless provided flexible alternative resources greatly needed in rural situations. As more professional level families opt for rural living the scope of available private services will undoubtedly increase. The economic viability of private contract services is presently being explored under some provincial government economic restraint programs, suggesting that private practitioners may have a potentially more significant role to play in future rural program developments.

Social Reformer

Given the nature of the client-centred relationship the rehabilitation practitioner is privy to insight regarding many social and health related issues. As with other social services personnel the rehabilitation specialist, by virtue of personal disposition or professional expediency, can be drawn into advocacy and political issues. Since social reform is a dynamic process dependent on grassroots involvement direct service providers are desirable recruits. Employment conflicts can arise, however, in advocating on behalf of certain interest groups, particularly if these are being serviced by the employing agency. Community and professional pressures can similarly develop in attempting to mediate the demands for immediate services and longer term prevention programs. As funding resources are limited social reform becomes a political exercise, an involvement frowned upon for public servants. Social reform can also be an alienating experience for the private practitioner, particularly if dependent upon government agency sources for referrals and services.

Community Member

As a resident of a small rural community private and professional life is highly visible, and oftentimes relatively undistinguishable. Requests for community service time will frequently seek contributions of professional expertise. The invitation to sit as a director for a society board, as a member of an advisory committee or as a consultant to a parent group is not unusual. The call to perform such informal duties beyond the scope of regular employment, while personally meaningful, can be very stressful. In Ritchie's (1982) words, the "emotional stress generated by pressures from neighbours an friends addressed to issues directly related to both one's professional identity and employment status is qualitatively different than pressures which are only ideological in nature" (p. 42). Stress can also be generated in the work environment when community service comes in conflict with employer expectations, e.g. when sitting as a director for a society applying to the employing department seeking more funding, or when advising a constituent group of their rights and the process of bureaucratic appeal. While the urban worker can work, dwell and provide community service in distinctive areas the rural worker is constantly subject to the successful integration of highly visible personal and professional roles.

These four roles illustrate some of the unique qualities of professional life experienced by rural rehabilitation practitioners. The personal and professional challenges associated with them contribute to making the practice of rural rehabilitation an exciting new field.

Preparation for Rural Practice

During the sixties and seventies, a period of rapid growth in the social services in most parts of Canada, it was common to recruit inexperienced young university graduates for rural assignments. The urban centres, with their professional opportunities for upward mobility and socio-cultural amenities for the family, easily attracted the experienced staff. Professional initiation in a rural environment was a phenomenon of many social service disciplines, e.g. teaching, social work, mental health and probation. High professional turnover during this time of expansion did little to stabilize rural services development. Although there was youthful energy and the infusion of new ideas and techniques there were problems with continuity and long-term programming. The economic reversals of the present decade and the viability of a rural lifestyle alternative, however, have provided a new stability in staffing rural services. More practitioners with a long-term personal investment in a rural lifestyle and commitment to the delivery of rural programs and services are now emerging.

Consistent with the model of the emerging rehabilitation professional, future practitioners will have transdisciplinary skills and knowledge to prepare them for practice. It is suggested, additionally, that there are personal qualities and a body of rural specific knowledge that are important for success in rural practice.

Transdisciplinary Skills and Knowledge

Brown (1984) speaks of the need for "an eclectic professional who combines the resources of many professions" (p. 242) in order to overcome the geographical and social problems of rural areas. The transdisciplinary knowledge base of the emerging rehabilitation profession bridges the disciplines of psychology, social work and education and provides an integrated knowledge of social service delivery systems, program development and individual program planning. The skills learned in assessment, intervention, remediation, counselling and administration are applicable to a wide range of settings: clinical, residential, vocational, educational or community. Such an eclectic approach to training will better enable the rural worker to adapt to a variety of role demands, e.g. clinician, educator, advocate, counsellor or administrator. Here the transdisciplinary approach is particularly useful in the rural environment, utilizing the skills and knowledge of several disciplines in the absence of specialists.

Rural Specific Knowledge and Approaches

The problems associated with the delivery of human services to rural populations are not exclusive to the Canadian scene. Despite social advances of western societies we sometimes forget fundamental principles. Coombs (1980), in discussing the basic needs of the rural poor in developing countries, suggests that the first "must" is to get to know the people, "to appreciate not only their physical circumstances and needs but their social and political environment; their beliefs, traditions, values and psychological outlook; their lifestyle and the daily demands upon their time and energies" (p. 12). Unless workers are educated to the politics of small communities, the implications of seasonal employment patterns, ethnic interactions, traditional value bases, religious and political allegiances, transportation problems, etc., they will have difficulty identifying with rural Canadians. Similarly, unless they adopt approaches consonant with rural lifestyles they are less likely to be accepted. It has been the author's observation that rural folk are proud of their self-sufficiency, their ability to troubleshoot, and their sense of community. They respect similar values in the professional. Practitioners dependent upon absentee bureaucrat for decisions, or who give impractical advice, or who don't integrate into the social community may lose respect. One of the most noticeable rural/urban contrasts is the "pace" of life. Because of the distances travelled hospitality is frequently extended to visit for awhile before the return trip. Reconciling the demands of caseloads, schedules and cost-efficient service delivery with assumptions implicit in traditional rural lifestyles can be troublesome if the system and the individual are not flexible.

Personal Characteristics

Ideally those interested in rural rehabilitation work would have previous personal experience living in a rural environment. This, unfortunately, is not always the case. Hopefully they would also have held previous professional positions. Thankfully this is becoming more common. The desire for employees with such background underscores the value of personal and professional experience. Such individuals are more likely to have the baseline requisites of awareness and maturity to be able to function in the rural environment. The lack of resources, scope of service requirements and the daily uncertainties further suggest a need for initiative, resourcefulness and flexibility. The responsibility and lack of supervision on many jobs require self-confidence and the ability to work independently. The critical community relationships required in most cases demand integrity and even diplomacy. This does not mean to suggest that all workers must have all of these attributes, nor that these are the only characteristics required. Rather it is intended to highlight the importance of personal characteristics in the job recruitment process.

The Future

This paper began by suggesting that the next few years will provide creative new opportunities for the practice of rehabilitation in rural areas. Political, economic and social influences of today are providing an arena in which the rural handicapped stand to make significant gains. Combined with the products of research and experience there is reason for optimism in this developing field. Recent legislation has entrenched the rights of the disabled; consumer advocacy has raised public awareness of their rights and needs. Economic restraint is causing a re-examination of traditional models of service delivery, demanding evaluation, accountability and new directions. The concepts of normalization, integration and community living have gained widespread acceptance. Access to social, recreational and adult educational programming opportunities are enhancing the quality of lifestyles. The viability of rural living among professionals and increased networking among rehabilitation specialists suggests an increase in the available quantity and quality of services. The climate for the application of research to practice in the field of rural rehabilitation is encouraging.

Summary

An optimistic view of the practice of rural rehabilitation in Canada has been presented. Central to this viewpoint is:

1) the recognition of distinctives in the practice of rural rehabilitation,

2) the acknowledgement of the multifold roles and demands placed on rural professionals,

3) the argument in favour of specific preparation for rural service,

4) the fertility of the socio-politico-economic climate for changes in service delivery, and

5) the emerging of a new, transdisciplinary rehabilitation profession.

Given these factors the practice of rural rehabilitation will provide new leadership in attacking rehabilitation issues in the next decade.

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COUNSELLING THE FAMILY WITH A HANDICAPPED MEMBER

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Introduction

Some time ago, a colleague and I were invited to present a workshop on sexuality at a regional meeting of the American Association on Mental Deficiency. As we were given enough time on the programme for two sessions, we decided that in the first one we would describe our own sexuality programme and in the second would structure a panel of parents who would discuss ways of dealing with their handicapped child's sexuality within the home. Consequently, we invited four competent parents with children of different ages to speak to the audience which consisted largely of human service professionals.

On the day of the workshop, the first session seemed to go rather well. The audience was attentive, and the presentation was followed by a lively and stimulating question period. The second session also began well with each panel member eloquently outlining their positive and negative experiences, and the lessons they had learned in the process of living with their handicapped children and adults.

However, this time the question period was quite different. One panel member was advised to use another method to resolve a situation with which he had already dealt successfully. Another was given a list of resource materials, while a third was told how she could contact a family therapist in her part of the city. The majority of the "questions" were of this kind and scant attention was paid to learning from the expertise of the panel members.

While I was uncomfortable during the session, it took me a while to understand what had transpired. It was rather a shock to realize that the expertise of our invited panel was not valued by an audience of human service professionals. Although the panel were highly educated and came from different professional fields and reported they were satisfied with their family situations, these statements seemed not to be accepted by the audience.

In speaking with individual members of the audience after the workshop, I began to understand what had happened. Some people politely told me they were disappointed with the panel session, and others spoke of family therapy, "incomplete grieving", and "the child that might have been". Nobody mentioned learning from the presentations or gaining insight into ways in which families successfully cope with issues arising from the presence of a handicapped member. In fact, I was alarmed to discover such widespread support for the idea that a family system is dysfunctional simply by virtue of having a handicapped member.

Some time later, another colleague and I spent four enjoyable afternoons providing in-service training for a group of workers from the British Columbia Infant Development Programme. At the request of parents with a developmentally delayed infant, these workers visit homes and teach mothers and fathers a variety of skills which are often loosely described as "infant stimulation". However, for their continuing education programme the workers had requested help with their communication and counselling skills.

As we talked, it became obvious that the infant development workers were filling far more than their designated role of teaching practical developmental tasks to parents. I learned of workers being asked to be a friend, a confidante, a provider of information, a babysitter, an advocate, and a marriage counsellor. However, it wasn't until I heard of a worker being asked to drive a mother to the supermarket that the underlying reason for these requests started to become clearer. In almost every case, workers were being asked to provide a link between the family and the community. Here, I was hearing not of family dysfunctions and psychopathology, but of feelings of social isolation from a network of friends and the community-at-large.

These two stories relate directly to the present situation faced by people who counsel families in which there is a handicapped member. On the one hand, there is the traditional psychotherapeutic viewpoint which considers the making of a handicapped child to be so traumatic that the parents almost always need prolonged therapy. On the other lies social action theory which maintains that the problems experienced by most families with a handicapped member are a result of inadequate support from the community-at-large.

One weakness in the psychopathology paradigm appears to be its inability to account for success. While, from time to time, I do see families who are chronically angry, overprotective, guilty, or destructive, most are well-functioning units attempting to adjust to new stressors. Unfortunately, many traditional therapists see parents who deal successfully and remain optimistic as overcompensating to diminish their sense of guilt (McKinnon and Marlett, 1984). It is this kind of "Catch 22" situation which exposes the political foundations of the psychopathology paradigm.

Perhaps from overzealousness, many family therapists have fallen into the habit of viewing their clients as inferior because they seek help. Certainly, many minority groups including people with handicaps have become aware of this issue and are becoming more selective in choosing their counsellors. To therapists espousing the traditional paradigm, I offer Guinevere's caveat to the superior Sir Lancelot in Camelot: "Have you jousted with humility lately?"

Obviously, this paper is not written in support of the psychopathology paradigm! That is not to say it has no application, for in a limited number of cases it may prove useful. However, the goal of this paper is to explore the practical application of social action theory to counselling the family with a handicapped member.

A Social Action Approach To Family Counselling

Research Evidence

As a psychologist, my first approach to a new area of endeavour is often through the research literature. I want to find out about new programmes and methods, the techniques used to evaluate them, and the results of these investigations. From these, I begin to formulate some guiding principles for my work.

Unfortunately, this is not a particularly enlightening method in relation to the topic at hand. A recent ERIC search netted 42 articles written on counselling the family with a handicapped member. Of these, 3 doctoral dissertations used a research format, but tended to focus on rather impractical topics such as "interpersonal process recall in parental verbal interactions". There were 14 articles which could be classified as "theoretical", and 20 relating to the authors' clinical experiences. All but one of the remaining 5 papers appeared to be unrelated to family counselling.

The last article had an experimental design, and concerned 22 families in which the homemaker was disabled (Schwab, 1975). After 18 months of a family-oriented rehabilitation programme, these people were compared to a no-treatment control group. The 6 inventory scales used in the evaluation indicated that there were no significant differences between the groups!

It seems then that there is little hard evidence to support a particular approach to this type of family counselling. Much of the so-called research evidence relies heavily on anecdotal clinical evidence, which tends to be subjective and confounded by the skills and traits of the individual counsellor. Of these clinical descriptions, about 40% were concerned with a social action approach, while the rest made assumptions about the family on the basis of it having a handicapped member.

Philosophical and Theoretical Bases

For me, the next step is to re-examine the philosophical and theoretical bases of my interactions with clients, and to attempt to integrate the available research evidence. Having originally been trained as a Rogerian counsellor, I make the following assumptions:

- the people who seek my services are my equals,
- they do not lose value because they need help or are handicapped,
- they deserve to be viewed with a high degree of positive regard and treated with respect at all times,
- we are allies in our work together and have much to learn from each other,
- and, finally, our society has vested counsellors with a great privilege and grave responsibility in allowing us to intervene in the lives of other human beings.

Furthermore, in taking a developmental perspective, I consider some of the writings on typical families. For example, Solomon's (1973) Stages of Family Development provide a useful framework. This author describes 5 developmental tasks:

1) In establishing a new family unit, the two adults need to relinquish their families of origin as their primary source of gratification, and invest in the emotional support of their newly-created intimacy.

2) This stage begins with the birth of the first child. Here, parenting roles are added to a deepening interdependence between the adults. Solomon suggests there may be a problem if the parenting relationship completely supercedes the one between the lovers.

3) Next the family needs to move from the gratification and need-satisfaction involved with the very dependent pre-school child to a different pattern of parenting which takes into account the growing socializing influence of the community. The parents must be careful not to create difficulties for their children either by keeping them overly-dependent or by abandoning them too soon.

4) The fourth stage is to relinquish the primary nature of the gratification involved in the roles of parent and child, and to develop the more secondary gratification of parents and separated adults. Sometimes parents are reluctant to give up these primary relationships as they realize this will force them to re-evaluate their marital relationship with a partner who has become distant and unresponsive.

5) The final stage involves the integration of loss, i.e. working through the physical, social, emotional, and economic losses of old age, while accepting increased dependence on one's own children.

For an interesting illustration of Solomon's Stages of Family Development, readers are referred to a paper on the Ramsay family in Virginia Woolf's To The Lighthouse (Proudfit, 1984).

Political Aspects

It is important to examine the personal politics of the situations in which my clients find themselves. If you are handicapped in Canada, you are a member of a devalued minority, for you can be locked away indefinitely in an institution and lose other of your basic human rights without due process of law. If somebody in your immediate family is handicapped, you too are stigmatized in situations where the connection is clear, e.g. a segregated school, a special class, or a sheltered workshop.

While Freire (1981) writes of the lives of peasants in South America, his work has much relevance for minority groups in our country. He writes of the oppressed and the oppressor classes. However, this is not a simple dichotomy, for aspects of both may reside in one person at the same point in time. Thus the foreman may be autocratic and demanding on the shop floor, yet subservient and self-effacing with his supervisor. Unfortunately, at present, more of the oppressor tends to dwell in people with positions of authority, while those without power are truly oppressed.

Freire goes on to make two other points of particular relevance to the Canadian scene. First, he states that an important way in which oppressors keep the oppressed subservient is by denying their reality. In order to liberate themselves, oppressed people must "name" their own reality.

The he points out that oppressors cannot liberate the oppressed. In order to fully experience their own personal power, this group must liberate themselves. The role of the person who already has power is to work with not for oppressed people in helping them name and deal with their own reality. This is why in writing of teaching devalued people, Freire carefully defines the roles of the teacher-student and the student-teacher.

In describing their experiences with professional people, many parents have complained, "He (or she) just didn't seem to listen to us." They feel that their perceptions and feelings are invalid. In other words, their reality is being denied!

Fortunately, parents of handicapped children have taken important steps toward liberating themselves. Over the last 30 years, they have banded together to form parent associations with the dual roles of providing services and advocating for their sons and daughters. While few would argue that they have completely achieved their goals, they provide a fine example of people who are freeing themselves by dealing with the world as they see it.

Counselling Tasks

I think by now the reader will be aware that the writings of Rogers, Solomon, and Freire are compatible with a social action approach to counselling the family with a handicapped member. Consequently, the social action framework outlined by McKinnon and Marlett (1984) provides a useful guide when meeting a family for the first time.

The first task is to redefine the family's concern in terms which take into account the larger social environments of the neighbourhood and community. This may involve disagreeing with the diagnosis of the referral source, or even asking the family to re-examine their perceptions of the concern. However, it is of the utmost importance that counsellors identify and validate the feelings of family members, while connecting these to factors both within and outside the home. Such an approach often challenges the family to re-examine their own belief systems, especially when they have internalized some of the values of their oppressors. The counsellor can facilitate this process by making explicit the connections between the family's distress and social conditions.

Next it is important to use open-ended questions in eliciting information which introduces a socio-historical perspective. For example, the counsellor may ask questions such as:

- How did you find out your child had a problem?
- How were you affected by the car accident?
- What was the response of the family, friends, and people in the neighbourhood?
- Who has been the most helpful to the family in the past?
- What do you want for the future in terms of opportunities for your disabled person?

In this way the focus of the problem tends to shift from within the family to the interface between the family and the community. This is also a time when the counsellor can acknowledge the strength of the family in having coped with such difficult circumstances. As this will be the first admiring comment many people have ever received from a professional person, a sincere and genuine acknowledgement can have a very positive effect on the counselling relationship (Kratoville, 1975).

It also soon becomes necessary to develop a future perspective, as it is unrealistic to expect that the solutions to today's problems will be effective forever. Thus the counsellor asks the individual family members, including the handicapped person, to explore their own long-term goals.

Once more, it is the counsellor's role to accept these aspirations, rather than to be an arbitrator of the validity of people's hopes and dreams. Remember that Albert Einstein's science teacher told him he would never amount to anything! Soon enough the steps toward their goals will face the harsh test of reality, so here it is important to dream a little. Without a goal, movement tends to be purposeless.

The counsellor needs to be sensitive to a potential area of conflict between handicapped adults and their families. As parents, many of us have grave doubts about the values and goals of our adult children. However, sometimes with reluctance, we accept their right to make their own decisions. Often this is harder to accept for the parents of handicapped adults, for they are aware of their child's poor record in decision-making and the possible dire consequences of risk-taking.

YOUR Asking the handicapped person his or her opinion about major goals may raise some interesting issues. For instance, there may be no reply because the person has always been expected to follow the directions of others. It may take some weeks before a response is formulated, or before the person trusts you enough to risk sharing their dreams.

The parents may also wish to discount these ideas for they fear the consequences of failure, and the community's response to the handicapped person's efforts. Furthermore, from past experience, they know they are the ones who will have to take on the added responsibility of retrieving the situation and smoothing things out. This is a valid perception and should not be mistaken for a manifestation of the neurotic "over-protectiveness" so beloved by many traditional therapists. Consequently, it is of great importance that the counsellor discusses the issues which arise from long-range goal-setting in the context of the family's experiences with the community.

As families begin to understand the issues in terms of their social network's responses to the handicapped member, a good deal of anger may be generated. This may be directed toward certain doctors and teachers, or towards neighbours and members of the extended family. Whatever the source, this anger is energizing and can be utilized in proceeding towards self-generated, long-term goals.

By now, it is very important that the family sees the counsellor as being aligned with them. The counsellor needs to be perceived as "being on their side" and working as a valued part of their decision-making process. McKinnon and Marlett aptly describe this relationship in saying it is "based on collaboration, acknowledging both the therapist's expertise in human processes and the family's expertise in living with a disabling condition". In essence, the counsellor's role becomes that of collaborator and advocate in a process of social change.

Often this is not an easy position for counsellors as many are employed by agents of social control, e.g. ministries of health or education, and government-funded social agencies. These bureaucracies often seem to respond negatively to change, even if it is much needed. Consequently, counsellors who support families in trying to alter the status quo, may be accused of subverting the goals of their employers. This situation puts them in a difficult ethical position where they may feel torn between their commitment to a family and loyalty to their employer. In such cases, it is essential that each counsellor carefully formulates his or hew own position on the issue and communicates it to the family. Counsellors could be accused of being in the unethical position of subverting the goals of their employers. Consequently, it is absolutely essential that each one clearly formulates his or her own position on this issue and communicates it to the family. In my experience, an open and honest statement is of more therapeutic value than flamboyant promises of support which are eventually broken.

Vignette #1:

The Blacks are typical of families with a handicapped member in that their reasons for seeking my assistance usually relate to their relationship with the community.

Mr. and Mrs. Black live with their 4 children in a house in the suburbs of a large city. Their 2 sons and 2 daughters range between 14 and 22 in age, with Mike (17) having a severe seizure disorder which has considerably delayed his intellectual development. Mrs. Black who is employed as a nurse's aide is warm and emotionally expressive, while her husband, a business manager, tends to be more reserved.

I first saw them about 6 months after Mike had moved into a group home, when his parents were having second thoughts about their decision to have him live there. After meeting with the whole family, it soon became apparent that this couple took their parenting responsibilities seriously. The children were polite and well-groomed yet not afraid to join our discussion or to disagree with their parents. Although Mike cannot speak, his nonverbal communication seemed to indicate that he enjoyed being part of the group.

Mr. and Mrs. Black had decided that Mike should live in a group home for several reasons. First, they had been told that it was "normal" for young adults to move out of the family home, and also that their non-handicapped children were being neglected due to the intensity of Mike's medical and educational needs. In addition, they themselves had noticed that their children's friends were reluctant to come to the house, presumably because they were uncomfortable with Mike's appearance and behaviour. Consequently, for a variety of social reasons, they had sought a group home placement for their son.

Now they missed Mike and were concerned because the group home seemed a little impersonal. When we discussed this, it soon became obvious that the other children shared the parents' concerns. Furthermore, they were able to convince Mr. and Mrs. Black that they did not feel neglected, although they agreed that their friends were reluctant to visit the house.

Eventually, the family decided that they wanted Mike to move back home. Unfortunately, due to his disability, it was not possible to get Mike's opinion, but people felt he would be in favour of the move. Certainly the other children wanted him back, and thought it was appropriate for him to live at home until he was about 20. They also started to consider their long-term commitment to Mike by speaking of their responsibilities after the eventual deaths of their parents. In addition, we were able to discuss some strategies that all family members could use in de-sensitizing their friends to Mike's handicap and encouraging them to visit more often.

Mike moved back home and there seemed to be more visitors so I did not see any of the Blacks for almost a year, until Allyson (19) came in to see me because she was having some difficulty in making the transition from high school to college. Another social action issue!

Vignette #2:

Paul Green (21) is an unusual member of an unusual family. He has been diagnosed as having minimal brain damage due to a birth injury, and attended special classes throughout his school career. Since finishing school, he has not held a job but has spent most of his time in his bedroom at his parents' home. Mrs. Green brought Paul to see me because he had been sexually abusing his 5 year-old niece.

Mr. and Mrs. Green have 6 children of whom Paul is the youngest. All but the mother of the abused child still live in the family home, with the two who are employed making a financial contribution to the running of the household. Although Mr. Green has a history of hospitalization for mental illness, he manages to hold down a full-time job.

Family members usually communicate with each other in an indirect way, in that a third party is usually coerced into delivering messages between the two protagonists. There is much stress and conflict in the home, with Brent, the eldest brother, using verbal and physical abuse in order to control the household.

Possibly as a coping strategy, Mr. Green spends as little time as possible at home.

Paul made slow progress in treatment as his family saw him as "mentally retarded", and therefore not responsible for the sexual abuse of his niece. He continued to be socially isolated and to be unable to express anger in a direct way. In addition, this young man revealed that he consistently used masturbatory fantasies of torturing women.

Among the families with a handicapped member who come to my office, the Green's are unique. While many of the social action factors still apply to their situation, this family clearly has some problems which will only be alleviated by intensive psychotherapy.

This vignette is used to illustrate 3 points. First, it is unusual for counsellors to experience this kind of family in the field of rehabilitation. However, even in this situation, social action theory has much to offer in helping the family to understand the origins of their social isolation and the resulting problems, to see the counsellor as an ally and advocate, and to begin to seek their own solutions. Nevertheless, Paul is in need of help of a more traditional nature in order to aid him in re-structuring his sexual thoughts so they are of a less dangerous and more pro-social nature.

General Service Planning

One of the ways in which the counsellor may be of assistance to the family is by taking the role of co-ordinator or advocate int he development of a General Service Plan (GSP). Usually the handicapped person is the focal point of this kind of plan which formalizes relationships between the person and those responsible for the delivery of a wide range of services. In practical terms, a General Service Plan can drastically reduce the family's isolation from the community.

As a first step, the counsellor meets with the handicapped person and the family in order to describe the various steps in the planning process, and to elicit their agreement to begin. However, it is important to remember that not all people will wish to have a General Service Plan. As a teacher-student, the counsellor must listen carefully for hesitation, and be guided by the family's right to choose. Experience has taught me that coercion of persuasion at this stage usually results in an unsuccessful planning process.

For the family who wish to continue, the next step is to identify the major areas in which they require services, and to give them some time to discuss the types of assistance they require. Then it is necessary to identify the actual service providers who will be invited to the first general planning meeting. Again the counsellor must remain sensitive to hesitations on the part of the family as various people are discussed. It is not unusual to discover that there are individuals whom family members do not trust due to previous negative experiences with them. If possible, these people should not be invited to the initial planning meeting, as their presence may well lower the level of trust in the room and thus retard the planning process.

Immediately prior to the first meeting, it is useful for the counsellor to ensure that large sheets of blank paper are pinned to a wall of the room where they can be seen by all the participants. On these, the counsellor, or an assistant, keeps a running record of the major decisions as the meeting progresses. Later, this record forms the foundation from which the General Service Plan is typed, before copies are distributed to each participant.

General Service Planning meetings are a real challenge for counsellors as their co-ordination requires fine interpersonal skills in order to ensure that everybody feels comfortable enough to participate yet stays on topic. Active listening, paraphrasing, and re-focussing are skills much in demand. In addition, great care must be taken with the seating arrangements to ensure people can hear and nobody feels excluded. For example, the handicapped person and the family should be at the centre of the group for they are the most important people present. In this context, it is desirable to avoid running meetings from the head of long narrow tables as these tend to be barriers to communication. The optimal setting tends to be a pleasant, sunlit room where the chairs are placed in a semi-circle facing the wallchart, with small, low tables for pens, paper, coffee cups, and other personal belongings.

Care should also be taken in matching the size of the group of service providers to the family's level of confidence. Some people are self-confident and are not intimidated by degrees and titles, but due to past experiences others tend to remain silent for fear of saying the wrong thing. In the latter case, it is probably better to invite only 3 or 4 service providers to a meeting until the family becomes more comfortable in expressing their opinions. On the other hand, it seems that a total of about 12 people is the maximum for a successful meeting. In any event, it is important to avoid destructive situations such as the one where the mother of a handicapped person in a room with 18 professionals introduced herself as "......the mother of the condemned man"!

At the first meeting, some of the service providers will know little about the handicapped person. Consequently, it is necessary to provide some information. One way to do this is to ask the family, friends and acquaintances to describe the person, who in turn is invited to comment on the accuracy of these statements. Although the presence of the handicapped person is usually sufficient to deter any disrespectful comments, the counsellor's role is to ensure that a positive tone is maintained. For example, a person who cannot speak might be described as proficient in signing, rather than mute. When done well, the exercise of describing the focal person can be additionally useful in that it helps the non-professional members to overcome their apprehension about speaking in front of the group.

The next step is for the group to focus on the following elements of the General Service Plan:

a) Major Service Areas: Here the major service areas are listed. These usually include a living situation, educational requirements, social needs, and leisure activities. In addition, some people may have vocational and employment requirements, complex medical needs, or need legal assistance. It is important to realize that individual differences can alter the length of the list from 2 or 3 items to more than a dozen, and that a person's needs should not be limited by the items mentioned in this paragraph.

b) Desired Environments and Preferred Services: With reference to each Major Service Area in turn, the group attempts to describe the optimal environment and programme. It is important to note that the availability of such a service is irrelevant at this point. The task of the group is to decide on the best option with the handicapped person. It is only by describing need that changes are made in service systems. Accepting that which is available usually maintains the status quo even when the service is poor and dehumanizing.

The following example of a preferred environment occurred when a young mentally handicapped man and his team were describing his residential needs:

"Jack wishes to live in an ordinary, i.e. non-institutional, house in Vancouver. It should be located in the south-central area of the city, not more than one block from the bus stop. There should be a fenced yard, and Jack needs his own bedroom. He does not wish to live with other handicapped people, but would like to share the home with 2 or 3 other young adults."

c) Available Services: Here the team lists all the resources which are available to meet the requirements of a particular service area. These are usually government departments or private agencies, but informal resources should not be overlooked. For example, Jack's brother was living in a communal house in the city and this was listed as a resource.

d) Service Gaps: In this section, a comparison is made between the desired environments and the services which are available. From this, the group gets a clear picture of which new services need to be developed. Therefore, if there are no integrated recreation programmes in an area, this gap needs to be addressed by the planners.

e) Person Responsible for Obtaining Service: One of the most powerful aspects of this kind of planning process is that it identifies people who are responsible for obtaining the required services. Furthermore, it holds them accountable in that they are required to report back to the next meeting. This can be rather stressful to the professional members of the team, but experience has shown that they tend to perform well under these conditions!

f) Person Responsible for Delivering the Service: This is usually not the person who obtains the service, for they tend to be administrators. Service deliverers are usually line staff, volunteers, and friends. Nevertheless, they are essential components in the plan, and should be identified by name.

g) Date Service Obtained: Finally, there is a space on the sheet for the counsellor to keep an ongoing record of the dates when the focal person was able to access each of the services which he or she required.

The length of meetings is also an important issue. For example, people tend to become tired, distracted, or bored after a certain period of time. The amount of time varies from person to person, but most people tend to stay involved for about an hour. Consequently, the counsellor should plan for about an hour of productive time between brief introductory and closing activities.

As mentioned above, successful co-ordination of GSP meetings requires is very demanding of the skills of the counsellor. One skill to be honed is that of pacing. While time must be allowed for participants to respond to relevant items, they must be kept on topic and quickly moved on to the next issue. Most people will support the notion that the time for renewing acquaintances and catching up on gossip is at the end of the meeting!

It may take 2 or 3 hour-long meetings in order to complete a General Service Plan. Consequently, it is suggested that counsellors allow an interval of 1 to 2 weeks between meetings. This period is short enough that people can remember the content of the last session, yet it allows sufficient time for them to begin to address their assigned responsibilities.

When the planning process is finally complete, the GSP is typed, and signed by the handicapped person and/or their legal guardian. A copy is then distributed to each of the group members together with a reminder of the date of the progress-review meeting, which is usually held within a period of 6 months. This critical point informs the team members that at this meeting they are accountable for the commitments they have made to the handicapped person and the family.

Vignette #3:

Mrs. White asked me to visit the sheltered workshop where her son, Dan was employed. The previous day, she had received a telephone call from the manager saying that they were having problems with Dan who was "masturbating all the time". Mrs. White was most concerned as she was also finding him to be angry and unco-operative at home.

The day I visited the sheltered workshop, there was little work available. Most people were standing around talking, and the manager told me this had been happening fairly consistently for the last month. When I first saw Dan, he was standing at the back of the shop with his hands in his pockets, and he appeared to be manipulating his genitals. When I was introduced to him, he had difficulty in making eye contact and indicated that he did not wish to speak to me.

At a later date, I met with Dan and his parents in order to discuss the situation. We concluded that this was not a sexual problem, but one concerning Dan's vocational placement. However, Mr. and Mrs. White were still concerned about their son's behaviour at home, which was making life very stressful for them. Therefore, I explained the GSP process and asked if they thought it might be useful to them at this point. They agreed to try this approach though Dan seemed somewhat reluctant.

First, Dan and I met so that we could get a clearer idea of his perception of his needs. Then Dan, his parents, his brother, and his sister attended the first GSP session, along with representatives of vocational, residential, and leisure services in the city. Although Dan's participation was minimal, the meeting appeared to go well. The White family were not intimidated by the professional staff, and another short meeting concluded with a number of specific plans for changes in Dan's life.

When the General Service Plan had been typed, I took the original to Dan's workplace with the intention of having him sign it. At this point, Dan made his first independent contribution to the planning process by refusing to sign the document! He said that he had thought it over and now he didn't want to do the things we had planned.

As we talked, it became clear that Dan was fearful of the major lifestyle changes which were outlined in the GSP. He said that he knew he had been difficult to live with at home, but now he was ready to change. He was prepared to participate in family events, and would try not to be so grumpy at home.

Furthermore, Dan agreed to attend another meeting of the planning team in order to address some of his concerns. With the support of his parents, Dan was able to participate much more fully in this meeting. The outcome was a general agreement that the changes in Dan's life should be made one at a time, with the young man indicating when he was ready for the next step. Consequently, it was agreed that first Dan would complete a job-training programme, then he would go on vacation with a peer group, attend a sex education class, and finally prepare to move out of his parent's home. As Dan began to see that his opinion was valued by the group, his fears declined and he became more enthusiastic about the plan.

Today, some 2 years later, Dan works as a dishwasher in a busy restaurant in the city. He lives in a co-op house with 4 other handicapped young people, both men and women. The tenants have a staff person who is on call should they need assistance. Although Dan often visits his parents on weekends, he remains rather socially isolated, so his current challenge is to make some new friends.

Summary

1) This paper concerns a social action approach to counselling the family with a handicapped member.

2) Traditional psychotherapeutic approaches tend to assume that the family is, and will remain, chronically dysfunctional due to unresolved feelings of guilt and grief about the handicapped person.

3) Such methods have contributed to the viewpoint that, in Canada, handicapped people and their families have become something of an oppressed minority.

4) Exponents of social action theory believe that these families experience considerable stress due to their isolation from a supportive community network of friends and services. Such counsellors seek to ally themselves with families in a mutual learning experience which enables family members to "name" their reality, and to take steps to remediate the situation.

5) Social action theory is compatible with the principles of Rogerian counselling and Solomon's Stages of Family Development.

6) General Service Planning is a strategy which incorporates many of the major tenets of a social action approach. While the counsellor's co-ordination role requires advanced communication skills, many families have benefitted from this type of intervention.

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FOOTNOTE

* While the vignettes in this paper are essentially factual, names and some details have been changed in order to protect the anonymity of the people concerned.

THE EXPERIENCE OF UNEMPLOYMENT OF THE PHYSICALLY DISABLED

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Introduction

In a previous study (Borgen & Amundson, 1984) we explored the experience of unemployment of men, women, youth, and immigrants. This study described in this article explored further this question with specific reference to a physically disabled population.

When considering the employment challenges facing physically disabled persons it is perhaps important to begin by affirming the fact that they have similar needs to the non-disabled population. As Acton (1981) points out, they need employment for financial reasons, to establish social relationships, to give them meaning in their lives and to provide a structural outline. Their needs are similar to those which have been identified by Maslow (1968), Toffler (1980) and others.

The specific challenges that impede a disabled person's search for employment have been identified by Stone and Sawatzki (1980). According to their research, the factors can be broken down as follows: (a) initial employment handicaps i.e., lack of marketable skills and a poor or nonexistent employment record; (b) management misconceptions i.e. such as higher accident and absenteeism rates, the need for extensive modifications, or poor coworker and customer relations; (c) the job interview process i.e., interviewer bias -- initial negative reactions which impact subsequent impressions. These barriers undoubtedly have an impact on unemployment. The research described in this article investigated how the physically disabled experience unemployment and how this compares to our earlier research findings.

Methodology

Thirty-five unemployed disabled individuals from the Greater Vancouver area were interviewed. Included in the group of 35 persons were 8 with brain injury, 11 with paraplegias, 6 with hemiplegias, 1 with quadraplegia, 1 who had been arthritic since birth, and 8 who were legally blind individuals. All had been unemployed a minimum of 3 months. Volunteers were contacted with the assistance of counsellors from agencies who work with disabled persons. Demographic information giving the person's disability, age, sex, marital status, previous occupation, length of unemployment, current and previous income, time since accident or illness was collected at the time of the interview (see Table 1).

Interview Procedure

Each subject was interviewed for an average of 60 minutes using the interview procedure outlined in the The Experience of Unemployment (Borgen & Amundson, 1984). This approach combines phenomenology and the critical incident technique. Phenomenology, a descriptive technique allows the individual the opportunity to freely elaborate on their experience without imposing a predetermined set of questions (Giorgi, 1978). With this approach, the meaning of the experience for the individual can be explored. In the critical incident approach, first described by Flanagan (1954), individuals are asked what factors helped or hindered them during their experience. Combining these two methods, we were able to gather information on people's experiences of unemployment and what concrete incidences brought them up and pulled them down.

The style of interviewing was non-directive with the interviewer using open-ended questions, paraphrasing, linking, and summarizing. People were requested by the interviewer to describe in as much detail as possible their experience of unemployment. Specifically, they were asked to include how they came to be out of work and what they thought and felt at that time and throughout their unemployment. The interviewer also inquired about their job search activities, what kind of emotional support they had received, how they structured their day, and whether they had thought about the meaning of their life during unemployment. At the end of the interview, they were asked to state what "brought them up" and "pulled them down" the most and to elaborate on what they felt was needed to help unemployed and disabled persons.

TABLE 1

Demographics

GROUP	N	SEX	AGE	MARITAL STATUS	PREV INCOME	CURRENT INCOME	TIME SINCE ACCIDENT	TIME UNEMPLOYED	DISABILITY
A	9	6 male 3 female	33.8	6 single 2 divorced 1 married (1 child)	$21,000	$13,457	1½ years (1 4 yrs ago-brain injured)	14 months	6 brain injured 2 para 1 hemi (stroke)
B	6	4 male 2 female	34.5	2 single 1 divorced 3 married (2 no children 1 with 3 children)	10,412	7,548	10 years & 3 blind since birth	14 months	3 blind since birth 1 hemiplegic 1 paraplegic 1 brain injury
C	11	9 male 2 female	33.6	7 single 2 divorced (1 with 2 children) 1 married (3 children) 1 single (1 child)	11,070	6,549	11.6 years	16.4 mos. (1 was 11 yrs, 1 was 10 yrs, 2 were 5 yrs. (not added in)	4 hemiplegic 3 paraplegic 1 quadraplegic 2 blind (illness) 1 brain injury
D	9	9 male	30	7 single 2 married (1 with 2	12,703	12,276	10 years & 3 since birth	16.7 mos (1 was 7 yrs. 1 was 6 yr 1 was 9 yrs and not added in)	1 legally blind 2 blind since birth 5 paraplegic 1 severe arthritis since birth

Data Collection and Analysis

The interviews were transcribed and summarized. Information from the summaries was then transferred on to rating sheets which emphasized the following aspects of the unemployment experience:

a) emotional shifts

b) time when specific emotions occurred

c) events or behaviours which were associated with these emotions

d) coping strategies

e) job search strategies

f) future expectations

After the data was placed on the rating sheets, the 35 experiences were compared with each other, and similar stories were grouped together. Four patterns of the unemployment experience emerged from this process. From these patterns, four graphs were developed which describe emotional reactions to unemployment over time. They illustrate high and low points of emotional experience, but there has been no attempt to quantify the relative magnitude of the high and lows.

Group A

Four patterns of emotional reactions emerged from our analysis of the data. Group A (Figure 1) consisted of six people with brain injury, two with paraplegia, and one with hemiplegia. All were recuperating from an accident or illness which had occurred within the last two years. None had worked since the onset of their disability. Their energies had been directed towards accepting their disability, rather than job search activities. Consequently, their pattern does not reveal reactions towards job search.

Two major themes surfaced during the interviews. First, these individuals were not only experiencing a physical loss, but loss of an occupation as well. These two losses contributed to a loss of their identity, financial security, purpose in life, and hopes for the future. Secondly, people were experiencing frustration in relearning tasks which seemed simple before their accident or illness. Having to cope with multiple losses and the frustration of relearning was a monumental struggle for all the people interviewed.

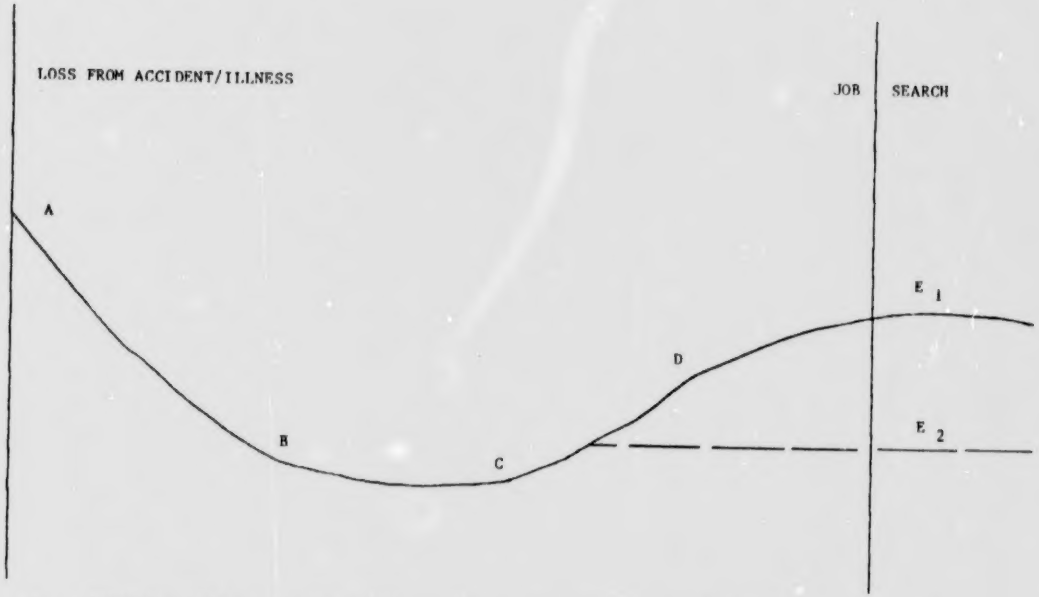
This frustration was most acute for the six brain injured people. These six also found it difficult to think about their future. They also believed they could go back to work quicker than they actually could. The realization that previous occupations may not be open to them created a sense of hopelessness and confusion. Most of these individuals mentioned that if they had not received encouragement and information on specific steps necessary for relearning, they could have vegetated and never improved.

All the people in this group had extensive vocational and rehabilitative counselling. After counselling, all felt hopeful about their future except for one individual, the hemiplegic. This particular person had no family support and was lost about what occupation he could do. After leaving the rehabilitative centre, he stayed in his apartment all day and rarely phoned his counsellor.

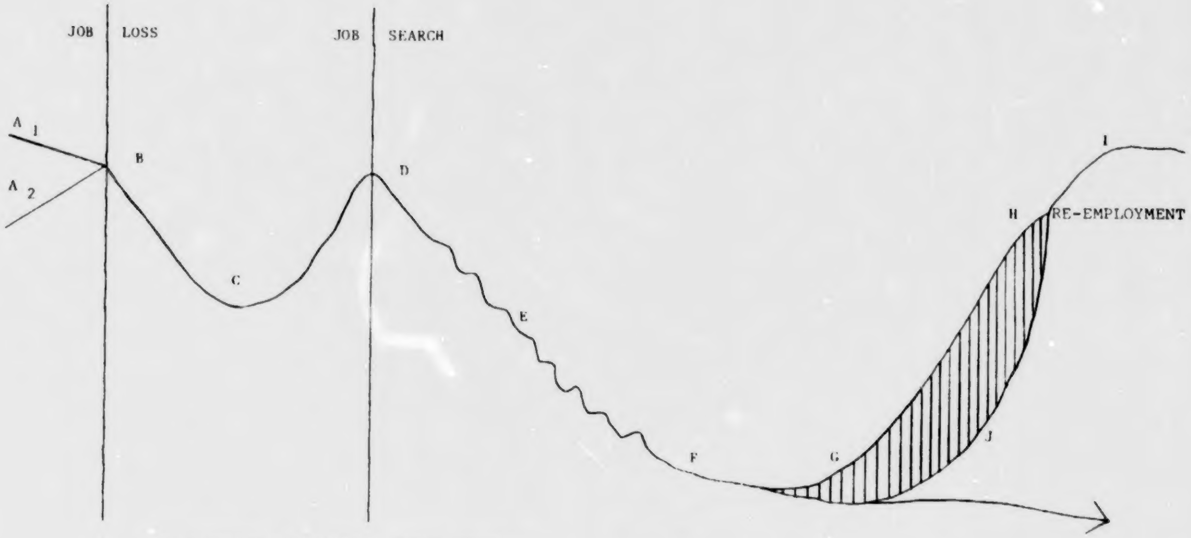
Group B

Group B (Figure 2) consisted of one brain injured person, one with paraplegia, one with hemiplegia and three individuals who were blind since birth. Their pattern of emotional reactions was similar to group A in The Experience of Unemployment (Borgen & Amundson, 1984) study. They were attached to the idea of work and were actively looking for employment. All felt they had come to terms with their disabilities, yet feelings of job loss were intermingled with the loss they experience daily because of their disability. They saw themselves as survivors who had overcome extreme obstacles. Most had recuperated without the extensive counselling that most disabled receive today. Their determination and strong sense of inner control kept them motivated to look actively for work. Unlike the other three groups in this study who usually waited for counsellors to phone them, these individuals initiated regular contact. They knew the proper channels to acquire the information they needed. Their self-motivation was particularly important during periods of numerous job rejections. Despite feelings of discouragement and hopelessness, they kept looking. Their job search slowed down, but never completely stopped. Job rejections and mistreatment by employers were the two major factors that caused them distress. Support from a job search group, retraining, information on career access, and self-assessments were factors that pulled them up.

FIGURE 1: GROUP A



A. Initial reaction to accident/illness (shock, hopeless, confused, fear)
B. Reflection upon accident/illness (discouraged, isolated, anxious, frustration)
C. Acceptance of accident/illness (hopeful, encouraged)
D. Retraining/support (renewed, determined)
$E._1$ Anticipation of job search (afraid, hopeful, yet realistic about job situation and disability, prepared)
$E._2$ Anticipation of job search (afraid, hesitant, unprepared)



A.$_1$	Anticipation of job loss (anger, worry)
A.$_2$	Anticipation of school loss (hopeful)
B.	Initial reaction to job lose (worry, anger, hurt)
C.	Reflection upon job loss (anxious, discouraged)
D.	Acceptance of job loss & anticipation of job search (hopeful, determined)
E.	Initial reaction to job search (discouraged, confused, anger)
F.	Internalization from job search (lost, hopeless, isolated, worthless)
G.	Support/retraining/career access (understood, hopeful, encouraged)
H.	Maintenance of job search (committed)
I.	Levelling (positive)
J.	Re-assessment of self

FIGURE 2: GROUP B

Group C

Group C (Figure 3) consisted of four people with hemiplegia, three people with paraplegia, one with quadraplegia, two individuals blind from illness, and one person with brain injury. Like group B, people in this group were attached to the idea of work. However, because of past job losses and low self-esteem, they could not generate enough energy to job search regularly. Most had given up looking for work and did not see an end to their unemployment. They internalized their rejections and believed something must be wrong with them. They would blame the employer in one sentence and then state that their failure to sustain a job probably was their own fault. This confusion was enhanced when employers did not give them an explanation for letting them go. They felt that their situation was completely out of their control. They were caught between the desire to find a job and their belief that their efforts would not be rewarded.

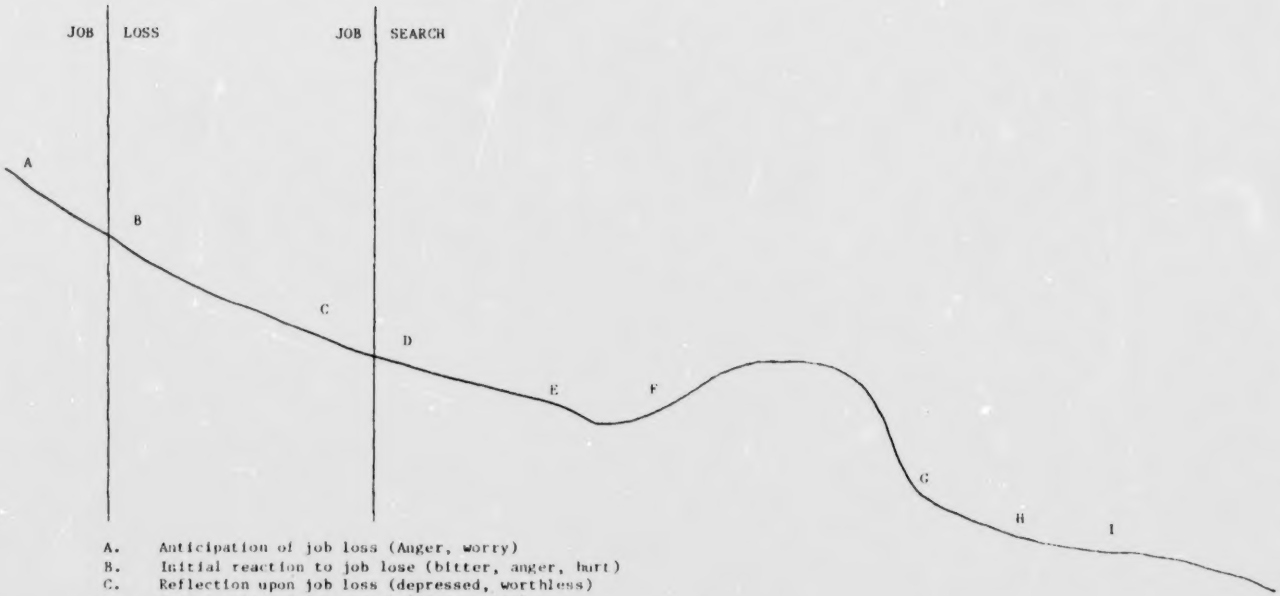
For all of these individuals, some event such as volunteering, school, or working at home pulled them up for a time, but it was not enough to sustain their interest. These events gave them a temporary feeling of worth and pride, but they later continued to feel like they were wasting away and not contributing to society.

Because most of these individuals recuperated from accidents or illnesses before psychological or behavioural rehabilitative services were available, they did not receive training and counselling. They were left without the proper tools to enter and compete in the job market. Most were reluctant to retrain unless the training would directly lead to a job.

Group D

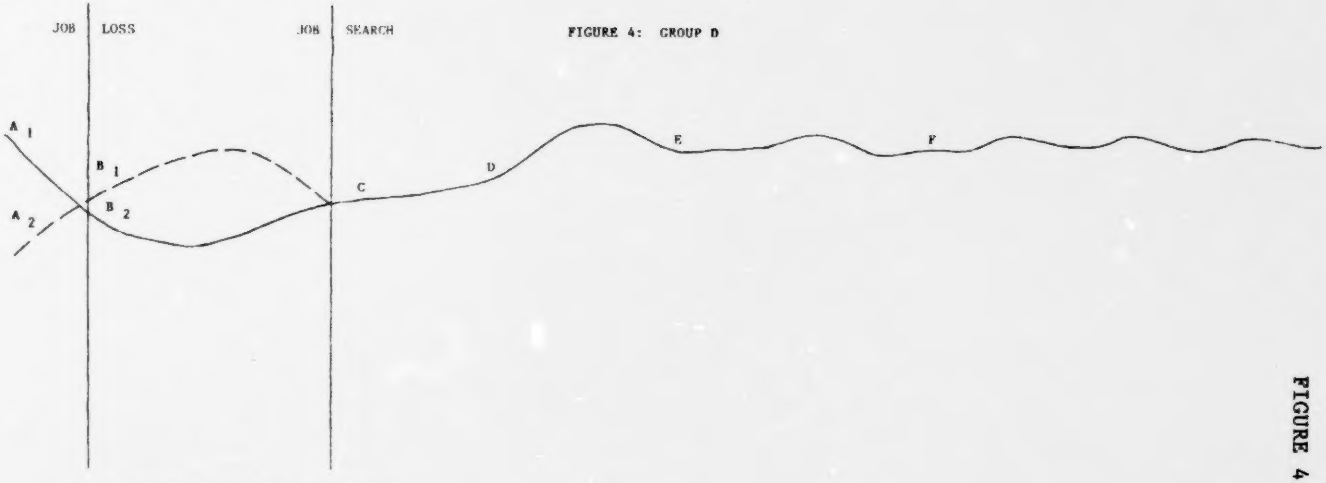
Group D (Figure 4) consisted of five paraplegics, one arthritic person (ankylosing spondylitus), one blind from an accident when he was a child, and two blind since birth. The individuals in this group had accepted their disability and did not connect their self-worth to a job. They had a strong sense of who they were apart from work. Finding a job was not their highest priority. All had some event or activity that kept them up. Some mentioned that they would have been discouraged if this event or activity had not occurred. These individuals were looking for work. Others stated that they were content with the way their lives were going and had enough money to sustain their interests. Paid work would have to be meaningful for them to invest their time and energy.

FIGURE 3: GROUP C



A. Anticipation of job loss (Anger, worry)
B. Initial reaction to job lose (bitter, anger, hurt)
C. Reflection upon job loss (depressed, worthless)
D. Anticipation of job search (fear, worry)
E. Initial reaction to job search (hopeless, discouraged)
F. Significant life event (volunteering, school, work at home)
G. Reflection upon life event (Defeated, not enough to pull them up)
H. Insulation from job search (lost, apathetic)
I. Internalization of rejection (worthless, despair, useless)

FIGURE 4: GROUP D



$A._1$	Anticipation of job loss (worry)
$A._2$	Anticipating of job loss (relief)
$B._1$	Initial reaction to job lose (anxious, apprehensive)
$B._2$	Initial reaction to job loss (free, positive)
C.	Anticipating of job search (hopeful, optimistic, yet realistic)
D.	Significant life event (school, support group, engagement, weekend work)
E.	Reaction to significant event (worthwhile, useful)
F.	Maintenance of job search (confident, philosophical)

FIGURE 4: GROUP D

Looking at the factors that influenced the shift in emotions from positive to negative for all the groups, combined, mistreatment or misunderstanding of employers and poor health were mentioned more often than other factors. Family pressure was also an important negative influence for all the groups except group B. People mentioned that families did not understand their illnesses and were pressuring them to find work.

Positive attitude, help from counsellors, and schooling/retraining were the most important factors that influenced the shifts in emotions from negative to positive. These results differed from The Experience of Unemployment (Borgen & Amundson, 1984) study where people mentioned family support more often than other factors. In this study, family support was mentioned frequently by groups A and C, but not B and D. People in groups B and D were more independent than those in the other groups.

People were also asked specifically about the kind of support they had received. Family support was mentioned the most, with many individuals stating that both family and friends were equally important. Others stated that help from the rehabilitative centre, organizations, and family was all supportive. They found it difficult to choose one over another.

The question, "How do your structure your day?", revealed many responses. For individuals that did structure their day, the answers varied. Exercise was mentioned more than any other activities as helpful. Getting up at specific times and getting out of the house for volunteering, school, or job clubs were also frequently mentioned. Housework was another activity that helped. For individuals who had difficulty structuring their day, T.V. and oversleeping were big influences. Only nine of the thirty-five individuals had no structure to their day. Most were motivated to create some structure.

When questioned about meaning in their lives, people answered positively or negatively. The positive answers varied. The following are the responses that were mentioned by more than one person: helping others, providing for my family, religion, exploring who I am, and being a survivor. Negative responses were given by thirteen individuals. Eight of the thirteen mentioned that they felt useless and lacked purpose in their lives. Others stated that they didn't know what gave their lives meaning.

The factors mentioned previously which influenced shifts in emotions either positively or negatively were taken directly from the analysis of the transcripts. People were also asked specifically to state one factor over all others that pulled them up. Seven of the thirty-five mentioned family, yet seven others stated that they could not give only one factor. They mentioned family as well as organizations, rehabilitative centres, or friends as being equally important. Other individuals stated that positive attitude, school, sports, and religion were important.

People were also asked to state what pulled them down the most. Negative thinking, lack of money, and job search activities were mentioned more often than other factors. Bureaucratic red tape and personal issues were also frequently mentioned.

When asked about their job search activities, most individuals went through counsellors at agencies for the disabled and rehabilitative centres, rather than hunt for jobs on their own. Counsellors at the government employment centres were not used as frequently. Most stated that counsellors at agencies and rehabilitative centres understood their disabilities better.

When questioned about their future, twenty-six of the thirty-five people answered positively. The most frequent response was retraining. Some other answers were work, setting up a business, and helping others. Of the nine who answered negatively, most said they did not know and planned only from day to day.

A number of general themes surfaced across patterns. First, individuals with similar disabilities did not react to unemployment in a similar manner. Having a particular disability did not predict which pattern the individual would fall into. Each pattern represented people with various disabilities. The criteria for membership in the groupings was based on factors other than disabilities.

There were four major internal factors that influenced people's reactions to unemployment: their attachment to the idea of work, sense of self-worth apart from work, belief that events in life were or were not in their control, and where they placed the blame when they could not find a job. If they attributed the situation to external factors, the harm to their self-esteem was minimal. However, if they blamed themselves, then their self-esteem suffered. With repeated job rejections, how people experienced these events depended on these four factors. People who looked realistically at the job market and their situation were able to continue their job search.

Implications

Although experiences of unemployment vary, there seem to be common patterns. Counsellors need to be aware of these patterns, yet at the same time never lose sight of the individual. Recognizing the shift in emotions which occurs over time can prevent many interventions that could be inappropriate. For example, putting pressure on individuals to keep up their job search when they are feeling apathetic, lost, and useless could be counterproductive. During these periods, it may be more appropriate to take time to listen to a person's feelings. People interviewed in this study mentioned that during these periods support groups, self-evaluation, and thoughts of retraining pulled them through. Counsellors played an important role at this point in their unemployment.

Counsellors need listening skills to assess a person's situation and understand their needs. Without these skills, counsellors will not be able to build up the trust necessary to work with the unemployed disabled. Most individuals we interviewed had never told their stories before. Many call their counsellors regularly to ask about job possibilities, but never discuss their feelings. Counsellors need to remember that phone conversations can also be counselling sessions. Without listening skills, counsellors could overlook the needs of those individuals who on the surface seem to be coping well. Simple inquiries about people's support system and the way they structure their day can reveal how well a person is doing.

People we interviewed made some suggestions regarding what was needed to help the unemployed disabled. They wanted counsellors to have first hand knowledge of disabilities, rather than merely text book information. Counsellors should know what people can or cannot do on the job and relate this information to the employer. For people who are rehabilitating, interviews should be highly structured with specific steps people need to take to return to a sense of "normalcy". These steps need to include information on bureaucratic red tape and financial advice. People are often faced with lump sums of money after their accidents with little knowledge on how to invest or budget. Individuals with little or no settlements need particular attention.

When retraining is suggested, it should lead to a job afterwards. With technological changes, more people will find it necessary to return to school. However, those who went through rehabilitation years ago are cautious about retraining. They are skeptical about the system and want the training to be practical. Many also mentioned that full time positions were too strenuous and wished there were more opportunities for job sharing.

More support groups are needed that discuss job search strategies as well as life skills. Groups provide the support, meaning, and structure which are important factors in coping with unemployment. Groups can also help people re-assess their lives. People with disabilities, forced to re-evaluate their lives after their accidents or illnesses are also facing decisions constantly because of long term unemployment. Sharing their experiences and talking about what has or has not worked for them can foster a sense of belonging and self-worth. Peer counselling, both in groups and individually, could be beneficial during recuperation and during unemployment.

Most of the people interviewed mentioned that they would like employers to be direct with them during interviews and while on the job. Many complained that they never knew why they were let go and usually left interviews without knowing why they did not receive the job. Individuals with a negative self-image usually assumed that something was wrong with them. It was suggested that employers who hire the disabled should be aware of the importance of direct communication with the worker. Employers who let individuals go after the government share of the salary is finished need to be reported. Acting as a liaison between employer, and client, a counsellor should assess the needs of both parties.

Money is an important issue for people with disabilities. Most jobs for disabled people pay low wages and are demeaning. There is little incentive to work if most jobs are paying at levels barely above minimum wage. Some of the subjects suggested that jobs should pay at least 8 to 10 dollars an hour, whereas others suggested that disabled people have tax breaks. Revisions in the government pension to allow for some work was also mentioned. Counsellors may need to become more involved with government policy to influence government decisions.

In conclusion, recognizing the patterns of emotional reactions can be helpful for understanding the unemployment experience and for planning intervention strategies. As mentioned previously, group A received the most assistance. Despite the losses they had experienced most were optimistic and determined to begin job search. Unfortunately, once the individual leaves the rehabilitative centre, counselling becomes sporadic. The onus is then left to the client to make contact.

Individuals who have self-motivation and strong self-worth will probably initiate contact, but others could become discouraged and fail to call. A downward spiral of more and more isolation could result. This would tend to indicate a need for more systematic contact with people who are disabled.

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DEVELOPING LIFE SKILLS TRAINING FOR SPECIAL CLIENTELES: INSTITUTIONALIZED OFFENDERS AS A CASE IN POINT

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Life Skills Training For Special Clientele

In the Preface to "A Conceptual Framework for the Life Skills Program", in 1982 Dana Mullen made the following observations:

> "The process of developing a training program is very much like the process of acquiring life skills ...
> In its original development period at Saskatchewan NewStart, the Life Skills course went through repeated cycles of experimental use: try-outs of a lesson; reflection on the consequences; a clearer understanding of the problems; a changed lesson in response to the clarification.
> Once a learning process of this nature has been initiated and given momentum during a period of intensive effort, it does not cease just because that phase of its life comes to a close. In a sense, every time a Life Skills lesson has been conducted in the last ten years, it was being tried out. Reflection has brought a deeper understanding of the needs for Life Skills.
> In the cyclical process, understanding is followed by renewed action. New Life Skills have been prepared in response to new insights. But how is the new training material to fit harmoniously into the whole Life Skills structure?"

Our own experience in the development and delivery of a life skills program for inmates in British Columbia's federal penitentiaries began in 1982 and continues to attest to the astuteness of Mullen's observations on the ongoing development of life skills training. In sharing our "new insights" with others in the field we are attempting to add to the Life Skills enterprise as a whole and to advance (in particular) the efforts of those seeking to meet the needs of "special clienteles".

The identification of special clienteles (as distinct from the general or "traditional" life skills clientele; i.e. economically disadvantaged adults) as specific and discrete target groups for life skills training is not new. Mullen (1982) for example has pointed out that the current concentration on generic and transferable skills owes much to the efforts of Warren et al (1972) to identify and develop an inventory of needed life skills specific to adolescents as a special clientele. Other "special clienteles" which have received particular attention in life skills training initiatives include for example northern adolescents (Gryba & Mullen, 1974), correctional institution inmates (Mardell, 1972; Williams, 1973; Smith et al, 1984), persons with mental illness (Riediger, 1973), and Natives (B.C. Ministry of Education, 1984). The definition of life skills for purposes of this paper is "Problem solving behaviours appropriately and responsibly used in the management of personal affairs" (Hemsl, 1973).

Offenders As Special Clientele

Our own experience in life skills training for a special clientele has led us to conclude that while the distinction between "traditional" and "special" clienteles is a useful one in terms of differentiating among particular applications for life skills training, it may also be misleading in some cases since it focuses only on the needs of the client group and does not address other client-specific characteristics which affect the training and skill acquisition process. That life skills training for some special clienteles implies, de facto, restrictions in terms of the training venue and the physical and social learning environment is also important to keep in mind when considering the provision of life skills training for a "special clientele".

The clientele consisted of male inmates serving sentences of two years or more (mostly for crimes of robbery or violence) in federal penitentiaries. The median sentence length category was 2-6 years; the median age range was 20-29 years. Since the programme was offered in maximum, medium and minimum security settings, the proximity to release date varied widely among the trainees. The actual range in sentence length was 2 years to life (25 years minimum); in age, 18 to over 60; in proximity to release, from those actually participating in some form of conditional release programme (e.g. day passes) to those having a decade or more left to serve prior to release eligibility.

When we set out to provide a correctional life skills programme to prison inmates as a special clientele, we began in much the same manner as Warren et al (1972) by undertaking an identification and analysis of needs specific to that group (Scott & Wiseman, 1982). Then, in consultation with the relevant life skills literature, we set objectives which later informed the course content and determined the process to meet the identified needs. Having undertaken this process with great care, we began offering the resultant life skills course to inmates and, much to our chagrin, were beset almost immediately with a litany of problems: the offender participation rate was variable and generally low; individual attendance was inconsistent; there was a noticeable lack of receptivity on the part of institutional staff; coaches complained of feelings of isolation and, eventually, of inadequacy or loss of confidence; coaches pointed out that group cohesiveness was often threatened by other institutional activities (e.g. inmate visits, canteen, laundry, parole hearings, disciplinary boards, etc.) which pre-empted participant attendance; some coaches reported they had to struggle with certain group members for control of the group; most coaches cited an apparent lack of inmate motivation to participate, or to participate actively, with some coaches citing episodes of openly confrontive behaviour, active nonparticipation or attempts to sabotage the group identity. In short, our program was failing.

Suspecting that these problems may be symptoms of a general underlying condition, we began to rethink and reassess our program design, development and implementation procedures. While we remained convinced that our needs assessment and subsequent course development had been completed with methodological soundness, we were faced with the coincident reality that the potential success of our carefully designed correctional life skills program was obviously threatened.

Incremental Versus Correcting Learning Activities

Our first clue to the nature of the overall problem was uncovered as we explored some of the assumptions which underlie the aims of life skills training and the correctional system respectively. While at first glance it would appear that each of these "activity milieux" have much in common in terms of desired outcomes for the same special clientele, closer inspection reveals that the nature of the central activity in each case is fundamentally different. The provision of life skills training is normally an incremental activity (adding skills to a presently inadequate inventory); however, the word "correctional" itself implies a qualitatively different activity. While a correctional program will involve some incrementally oriented activity (many offenders are from "disadvantaged" sectors of society), the lion's share of the emphasis is on corrective (change oriented) activity. From the point of view of a life skills coach, such activity would include redirection of some present skills and removal/replacement of some behaviours which detract from being (perceived as) a balanced, self-determined individual. In particular, these behaviours are likely to include self-presentation skills.

Once it became obvious that the central nature of the activity varied in accordance with the mandate associated with each respective "activity milieu", we began to explore more fully those characteristics of the special clientele population which are not directly linked to skill increment needs, yet which must be taken into consideration when designing a life skills program for this clientele.

First, it was clear that this clientele was, first and foremost a captive audience in a correctional system. Although social participation may best be measured as a continuous variable, we may, from a life skills point of view, roughly divide society's adult members into three main groups: (1) responsible, contributing citizens with average to high levels of social participation; (2) those with minimal or no social participation who contribute little or nothing; and, (3) those who not only do not participate in, but also detract from the maintenance of society. The first of these groups does not need life skills training; the second comprises the "traditional" clientele (disadvantaged adults) (Himsl, 1973); the third constitutes the "special" clientele in question. The fact that prison inmates comprise a homogeneous group of social deviants (as opposed to merely lacking in skills) cannot be overlooked. In Canada's federal prisons, as a general population, these offenders can be said to constitute the "worst case scenario" for remedial programming - both incremental and corrective.[1]

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[1] Canada's federal penitentiaries retain correctional jurisdiction over offenders serving sentences of two years or more while provincial gaols serve to detain those sentenced to less than two years imprisonment.

The Institutional Culture

As a special clientele, a homogeneous group of offenders evinces to a greater degree the same lack of motivation for such incremental development activity as life skills training as witnessed in the "traditional" clientele by Himsl (1973) and Warren (1973) and also by Williams (1973) in describing the motivational level of correctional inmates in a therapeutic community setting. The extraordinary need for motivation among incarcerated offenders is clearly more pressing than for the traditional clientele, and has been cited as a vital ingredient for successful offender development (Ingstrup, 1984). Members of this special clientele have experienced the personal and social problems which typify many of the disadvantaged population (Himsl, 1973), and have experienced them (or brought them upon themselves) to such a degree and in such numbers that they have become more than merely disadvantaged, unmotivated social nonparticipants. They have, in fact, become social outcasts, "exiled from living" (Goffman, 1961) and, at least while institutionalized, have come to base their own self-esteem and identity in terms of a counterculture.

This latter point is of no small importance. The coach who cannot identify, understand and accommodate (i.e. use, not ignore, discard or denigrate) the "inmate code" or the dynamics of the institutional culture, will experience immense difficulty (if in fact the deed is possible) in generating coach/learner and learner/learner rapport, group cohesiveness and a safe environment for self-disclosure. He or she may struggle with one or more of the learners for group control.

The existence and pervasiveness of the inmate code must be taken into account in the development (especially the staffing) of a correctional life skills program. Taken in conjunction with the "total institution" environment (à la Goffman, 1961) which engenders and maintains it, this inmate counter culture is a twenty-four hour per day guide to behaviour, social status and survival within the institution - and for its inmates there can be no respite. It takes a very astute and special coach who can accommodate the inmate code in the lesson material and generate with it, over time, an atmosphere of trust among all participants (learners and coach) in which productive self-disclosure is encouraged and occurs without compromising his/her own "code" or the respect of the learners as individuals or as a group. Goffman (1961) in considering some of the dominant themes of inmate culture cites: "... a peculiar kind and level of self concern":

> "The low position of inmates relative to their station on the outside ... creates a milieu of personal failure in which one's fall from grace is continuously pressed home. In response, the inmate tends to develop a story, a line ... which he constantly tells to his fellows as a means of accounting for his present low estate. In consequence, the inmate's self may become even more a focus of his conversation and concern than it does on the outside, leading to much self pity." (Goffman, 1961: p. 67).

This manufacturing of reality militates against the honest self-disclosure at the level required for development in the group process, especially when the inmate culture includes norms regarding "blowing one's cover" and sanctions for "blowing another's cover". Again, it requires an extremely skillful coach to be able to guide the learning group in a progressive direction while being sensitive to the "fine line" which separates acceptable from unacceptable discussion material and assisting the group, over time, to redefine, move or remove that "fine line".

In order to compensate for these tendencies of prison inmate clientele toward low levels of motivation and participation, the life skills coach must be able to produce the lessons and course requirements as "removal activities, ... pursuits which are sufficiently engrossing and exciting to lift the participant out of himself". (Goffman, 1961; p.p. 68-9).[2] The role of the coach in creating this kind of atmosphere inside a total institution, at once aware of the inmate culture, is crucial. It calls for a highly skilled, talented and, perhaps, more highly trained individual than the coach involved in life skills training in the "traditional" sense.

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[2] Goffman also indicated that "removal activities" for an inmate tend to be "voluntary, unserious ... making him oblivious for the time being to his actual situation". We are not suggesting that life skills, as a removal activity, be unserious or deny the inmate's present reality.

Confinement and Training

The fact that this special clientele is confined in a total institution has other consequences for the provision of life skills training which do not obtain in the more traditional delivery setting. Inmates must receive their training within the confines of the institution. Thus, the coaching staff takes the program to an alternative venue in which they have no authority, little control and with which they often have little or no familiarity. Inmates are not brought together only for life skills lessons; they live and are confined together twenty-four hours a day. The consequences of self-disclosure exist beyond the classroom. Inmates are not visitors to the life skills training venue; they remain within the institution which continues to exert legitimate authority over all aspects of their lives. Thus, other activities occuring within the institution and arranged under institutional authority can pre-empt inmate attendance in life skills sessions. This situation stands in marked contrast to that of the coach conducting life skills training at the campus or centre where he or she can exercise some degree of authority and control, in an environment with which he or she is familiar and can rely to a much greater degree on normative attendance and participation criteria from a clientele demonstrating, at the very least, enough motivation to register, enrol and physically move themselves to the delivery site.

Lack of authority, on the other hand, can be viewed as an advantage which the "outside" coach possesses in such a situation. In fact, possession of legitimate institutional authority would effectively render such training initiatives useless. Inmates, in accordance with the inmate code, will not develop the necessary levels of interaction and cooperation with those whom the code dictates are "bulls" or "screws". The coach, who, as an outsider, can create an "outside" environment in which inmates gradually become confident and trusting enough to suspend the institutional frame of reference will stand the greatest chance of success.

It should not be forgotten that the desired outcomes of life skills training include the learners' attainment of balanced self-determinism (Curtiss and Warren, 1973), adequate interpersonal skills and competence in problem solving. Each of these desiderata, once attained, is to be applied in all areas of the learner's life. Part of the coach's role is to provide advice related to skills application beyond the classroom. At the campus or learning centre the coach has many opportunities, outside of the classroom, to observe, practice and reinforce life skills and their development in each learner. The coach has extended contact with the learners, is generally available for consultation, and his students are free to make appointments or have time to wait for the coach's availability. The coach can provide advice for skill generalization or transfer to other areas of normal social living with which he or she is familiar.

The coach in the total institution, however, is often restricted to classroom contact with the group, has less opportunity to observe and reinforce skill demonstration in other settings and is unlikely to be familiar enough with the nature of total institutional life to be able to provide confidently valuable advice on skill application in other areas of prison life. Yet, despite the emphasis on providing generic "trans-situational" skills in a developmentally sequenced manner (simple to compound to complex) which compensates somewhat for this situation it should not be forgotten that it is the institution itself which comprises the inmate's "lifespace". Skill acquisition must be demonstrated, practised and reinforced within the walls of the prison which "... tears the individual away from family, community, education and employment responsibilities and isolates him in an abnormal society where he is exposed to a criminal value system (and where) opportunities to practice constructive decision-making are limited". (Williams, 1973; p. 11). Thus, the purveyor of life skills training to inmates is faced with a rather tall order: added to the challenge of preparing the inmate with skills for his successful release, is that of changing his approach to life in prison. It is worth noting, then, that while the correctional administrator may look to life skills training as an appropriate program to combat recidivism by developing in offenders the required levels of competence in post-release coping skills, the informed life skills coach will not be fooled by the apparent simplicity and "face validity" of such thinking.

Towards a Solution

The key to dealing with this situation lies in the integration of the life skills program with other institutional program initiatives and with the inmate assessment methods and personnel existent in the institution. Since it is institutional personnel (including case management staff, work supervisors, custodial officers and such counselling specialists as chaplains and psychologists) who are charged with the ultimate responsibility for inmate progress and who are in a position to observe, assess and reinforce positive behaviours which result from corrective and incremental development programs on a continuous basis, then it is of the utmost importance that these individuals are capable of acting as effective catalysts for the life skills development process, without assuming overtly the role of coach. In other words, the coach, benefitting from the non-authority aspect of this role, must provide life skills training within the institution as a cooperative and articulated venture with capable institutional authorities, without being perceived as aligned with either the inmate clientele or institutional staff.

In terms of designing a correctional life skills program, then, it is of paramount importance that the pre-implementation phase includes not only an assessment of the clientele needs, but also attention to institutional needs, policies, procedures and routine. There must be ample provision for staff orientation and the inclusion of institutional personnel in the learner assessment and program evaluation processes. Reinforcement for demonstration of skills acquisition by inmate learners outside the classroom in all areas of institutional life must be forthcoming from institutional staff. The ability of prison staff to assess and reward inmate progress is crucial. They must be able to provide the motivation, skill modelling and reinforcement in the normal exercise of their duties and responsibilities which the coach is unable to afford beyond the immediate classroom learning situation. More importantly, the coach must be capable, willing and permitted to promote this level of institutional staff involvement.

It may also be desirable to attenuate the content and process of life skills training in accordance with such offender sentence administration variables as chronological proximity to release and type (security level) of the correctional facility. As offenders approach release and reside in institutions with lower security levels and more access to community resources inside and outside the confines of the facility, there is, generally speaking, a tendency for them to exhibit higher levels of motivation and active participation, and less commitment to the inmate culture. There is also a greater opportunity to expand the role of the coach as the inmates are likely to have more access to the coach and to demand more practically oriented content related to a social reality with which the coach is more eminently familiar. Thus, in the minimum security or half-way house setting, the life skills program is more likely to resemble that proposed by Williams (1973) for inmates in a therapeutic community.

Based upon the preceding discussion, it would appear obvious that the development of life skills training for special clienteles (and in particular for those who are institutionalized) requires more than specific attention to the life skills needs which typify the clientele in question. Special attention must also be paid to ancilliary characteristics which also discriminate that particular clientele from other special clienteles or the traditional centres whose main commonality is comprised in being "disadvantaged" or lacking in coping skills.

While there may be no general formula to follow when attempting to apply life skills training to a special clientele, our experience in developing a life skills course for corrections has led us to recast Conger's (1973) comments on the history of Life Skills as a prescription for future efforts to meet the needs of special clienteles:

> "Thus, the social invention of the Life Skills course has required ancillary inventions to become a reality - the invention of the course, the coach, the coach course, the creation or adaptation of organizations, and programs and structure to offer the course" (Conger, 1973).

Summary

1) Life skills training for special clientele must take into account factors jointly characteristic of the client group, i.e. the training venue, and the physical and social learning environment.

2) Life skills learning is an incremental activity; prison programmes are designed to be correctional in nature.

3) The federal offenders, as a special clientele, constitute a special challenge for life skills training. They are more than merely disadvantaged unmotivated social non-participants, they are socially deviant (as opposed to socially non-participatory) and their incarceration and subcultural involvement must be acknowledged in the design and delivery of life skills training to this clientele.

4) The constraints of life skills training delivery in a prison setting must be accommodated. These include the operational and security requirements of the institution which affect the prison routine and the physical aspects of the training venue, the compromising of the life skills coach's authority and the limitations on the coach's ability to provide advice on, or to reinforce skills application beyond the classroom, but within the prison walls.

5) If life skills programmes are to overcome these limitations, they should begin with the integration of correctional life skills programmes with other institutional offender development initiatives, while the role of coach remains filled by an "outside" person, unaffiliated with the correctional service.

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A MODEL FOR EVALUATING REHABILITATION PROGRAMS: THE CASE EXAMPLE OF THE ST. JOHN'S JOB GENERATION PROJECT

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Introduction

The accountability trend in the human service field has had a profound effect in sensitizing rehabilitation agencies and programs toward the necessity for evaluating themselves. Most authors in this field concur with the notion that program evaluations of service delivery systems are the principle vehicle in which accountability of rehabilitation programs is determined (Gross, 1976; Baker and McPhee, 1979; Matkin, 1981, 1982; Bayer and Brown, 1982; Parmenter, 1983; Brown, Bayer and MacFarlane, 1984). Whether such evaluations are legislated, mandated or requested by an agency or program, their importance in determining the efficacy of service delivery is critical to understanding whether such programs work or not. In fact, it would not be too presumptuous to speculate that the future of rehabilitation programs in both the United States and Canada rests on the ability of these programs to develop evaluative capacities which are meaningful, practical and sensitive to the needs of the clients and communities they serve.

In reviewing the literature on the evaluation of rehabilitation programs for this paper, four distinct trends emerged. First, much of the literature was general and suprisingly vague in regard to addressing the specific evaluative needs of clients, staff and administrators of rehabilitation programs. Second, more literature was oriented toward publishing the findings of specific program evaluations, and less was directed toward how to conduct such evaluations. Third, much of the literature was fragmented and piecemeal in nature reflecting the idiosyncratic, diverse and numerous range of human service organizations (HSO's), agencies, or programs apparent in the rehabilitation field. Finally, few published reports presented simple and practical methods which could be used as a guideline or framework to evaluate rehabilitation programs.

The purpose of this paper is to identify specific evaluation issues and concerns related to rehabilitation programs by presenting a model which was developed and utilized with relative success. After a presentation of the model, a case example using the JOB GENERATION PROJECT funded by the Canada Employment and Immigration Commission (CEIC) in St. John's, Newfoundland will illustrate its applicability. The evaluative model was subsequently adapted and is currently being considered by other similar JOB GENERATION PROJECTS across Canada. The major subheadings of the paper include: a) Prerequisites for Evaluating Rehabilitation Programs; b) A Model for Evaluating Rehabilitation Programs; and c) The Case Example of the Evaluation of a JOB GENERATION PROGRAM in St. John's, Newfoundland. The main contention of the paper is that it is as important to learn how to successfully evaluate rehabilitation programs as it is to report on what was found in such evaluations.

Prerequisites for Evaluating Rehabilitation Programs

Certain prerequisites must be in place prior to the conduct of any rehabilitation program evaluation. These are construed as essential ingredients for successful evaluations, and all must be systematically addressed and present to some degree. In another sense, if one of these is not addressed or present, any subsequent evaluative effort could be seriously undermined. These include:

1) a sincere commitment on behalf of the agency/program to both conduct and support the evaluation;

2) answering the why, when, and how of the program evaluation;

3) the goals and objectives of the program, or components of it which are being evaluated, need specification in measurable terms; and

4) information needed to conduct the evaluation should be in retrievable form.

Although these may seem obvious to some, they require specification, as numerous agencies or programs continue to conduct evaluations without considering them, and invariably such efforts usually prove unsuccessful. Each of these will be briefly discussed and where appropriate, the roles and relationships between agency/program personnel and program evaluators will be highlighted.

Agency or Program Commitment

Any rehabilitation agency or program which embarks on an evaluation without having the support of the administrators, managers or key decision-makers in the respective agency or program is seriously remiss. It does not matter whether the impetus for the evaluation comes from the external organizational environment (e.g. the community, funding sources, board of directors, etc.) or internal environment (e.g. line staff, supervisors, administration). In either case, a sincere administrative committment is critical to the evaluation, its development, conduct and ultimate dissemination.

Administrative support is the key to influencing and obtaining other levels of support in the agency or program, and as a result needs to be obtained first. Consistent with the 'domino theory'; other levels of support (e.g. line staff) quickly follow the administrative lead, although their motivation for desiring the evaluation may be very different from agency/program administrators. Thus, gaining support for program evaluations is an area in which much reciprocal learning and co-operation between rehabilitation program administrators and program evaluators (whether in or out-of-house evaluators) needs to come about. For example, administrators can learn to input program evaluations and support them in better ways, and program evaluators can learn how to tailor their evaluative efforts to meet the needs of the respective agencies/programs which they are evaluating.

The Why, When, and How of the Program Evaluation Must Be Answered Prior to its Conduct

These three questions seem harmless enough, yet if they are not satisfactorily answered prior to conducting the program evaluation, a veritable 'Pandora's box' of problems may unfold. The questions are best answered in sequence such that why must be answered before when and how. It matters less whether the latter two (when and how) are out of sequence because they are usually addressed simultaneously, as the answers to one usually influence the answers to the other, and vice versa. However, it is imperative that the question why be answered first.

Rehabilitation agencies or programs should not be too concerned if their answers to the question -- why conduct a program evaluation?....seem as trite or obvious as some of the standard responses. These include:

1) it was mandated (e.g. by a funding source, etc.);

2) it was recommended (e.g. by board members, or a new administrator, etc.);

3) the agency or program may be having some difficulties, and would like to determine why;

4) other agencies or programs have conducted evaluations which have influenced this agency/program to conduct an evaluation;

5) it may be 'politically astute' for the agency to conduct a program evaluation at this time (e.g. for program justification, etc.); or

6) it seemed like a good idea at the time.

Regardless of the reason, which could be one of these or another, the point is that at the onset of the program evaluation, the agency or program must agree in an open and honest way to answer why which in turn, directly influences when and how.

When the evaluation should be conducted is an important issue which rehabilitation programs need to be sensitive to. The general preference is the earlier the better, as agencies/programs may build the potential for subsequent evaluations into their overall planning and operational frameworks. Examples of this include: designing treatment plans for data collection; establishing baseline data for comparisons at some point in the future; recording information which can be updated or elaborated on in the future; formating records, files or forms for retrievability; and, commencing the process of socializing the agency or program toward the evaluative process and its relationship to treatment. Without question, when the evaluation occurs determines both the nature and outcome of the evaluation.

Ironically, the least favourable yet most frequent situation which occurs are post hoc evaluations conducted after the program has been operational for some time. These types of evaluations must face problems such as: difficulties in tracing the history of the program; difficulties in assessing clients or staff who have left the program; contending with staff turnover; and, contending with missing, lost, misplaced or forgotten information which inevitably occurs over time. Such difficulties may be avoided by commencing the evaluation process at the onset of the program.

Finally, how to do the evaluation is best resolved by those who are conducting it. How clearly implies issues which may be beyond the scope of those not directly involved with the evaluation (e.g. resource utilization, research methodology, costs involved, etc.), and one should leave such matters for those who are best trained to do them (e.g. program evaluators). Thus, rehabilitation program administrators should defer judgement to such expertise, and work with the evaluator (or evaluation team) in ensuring that the evaluation does not consume the operational aspects of their programs which may in turn, influence service delivery.

Goals and Objectives Require Specification

Program evaluators have a justifiable 'hang-up' about goals and objectives because they can't evaluate programs without them. Goals and objectives when operationalized in evaluation terms become efficiency and effectiveness criteria which are the lifeblood of any evaluation. In fact, evaluation research is distinguished from basic or applied social science research in that it always assesses program efficiency, and/or effectiveness.

In order for rehabilitation program evaluations to proceed in this area, program goals and objectives require:

1) identification;

2) some consensus agreement about what they are; and

3) specification in measurable terms.

This process (of determining goals and objectives) is both deductive and reductionistic in nature. In simpler terms, one proceeds from general goals to specific goals and objectives, and during this process breaks the program down into component parts, each having different (or similar) goals and objectives.

The logical place to commence this process is the funding source as most specify criteria in their mandates, proposals, guidelines, or requirements. Generally, these criteria constitute the first level goal or mission statements which guide the program or program components. Although it may seem surprising to some (in this day and age of human service agency accountability), it would be remiss not revealing that in some cases, funding sources are very negligent in holding agencies accountable for service delivery, and some sources dole out funds indiscriminately on the basis of informal, loose or ill-defined criteria. In recipient agencies or programs such as these, evaluators through the process of determining goals and objectives, may inadvertently assist the funding source in clarifying their relationship to the host agency or program.

In regard to having consensus agreement about goals and objectives, the operative word here is consensus. Certainly in some instances, clients, staff or board members, and/or evaluators may have differing perceptions about the goals and objectives that guide their programs. Thus, this process may help clarify what the goals and objectives are to all of these parties. Asking a variety of agency personnel to define their goals and objectives may also prove a meaningful human relations exercise in getting those involved directly or indirectly in the evaluation to begin communicating toward consensus goals and objectives. Through ongoing and open dialogue between the evaluator(s) and agency personnel, consensus agreement abut this issue will usually emerge.

Finally, the specification of goals and objectives in measurable terms is once again a task best left to those conducting the evaluation. This involves the operationalization of concepts into measurable and attainable terms which are usually:

1) time-framed (i.e. they occurred, or will occur over specified period of time); and

2) quantifiable (usually based on units of service delivered and the outcome of those services).

In the past decade, the literature in the field of program evaluation has focused attention on better ways of measuring goals and objectives at both a micro practice level (Hersen and Barlow, 1976; Bloom and Fischer, 1982; Hudson, 1982), as well as macro levels (Tripodi, 1983; Isaac and Michael, 1977; Austin and Associates, 1985).

Information Retrievability

Human Service Organizations (HSO) which encompass all rehabilitation agencies or programs, have a peculiar relationship about collecting human service information. This relationship is peculiar for a number of reasons. First, most HSO's are 'information short' when it comes to having meaningful and retrievable information available for program evaluations, yet they perceive of themselves as having an information overload. Second, most HSO's have a disproportionate amount of information about their clients, and very little about their staff or communities. Third, most HSO's collect information for the wrong reasons. For example, either:

1) because they have to (it is a requirement);

2) because they have always collected information as such; or

3) so they may better internally manage themselves.

The latter reason is the only one thac remotely resembles a rationale which applies to program evaluation research.

Information (referred to as data by evaluators) must be in accessable and retrievable form if any evaluative effort is to occur. More simply, without it organized as such, there can be no evaluation. Astute evaluators will usually appraise the 'state of the art' of the data, prior to conducting an evaluation due to its critical importance in this process. Again, the significance of having the evaluation commence early on in the program development, ensures that information or data will be at least formated in retrievable form at some point in the future. The final point to be made about information retrievability is that most evaluations, through the process of their conduct, will inevitably assist the agency or program to organize or systematize their information for subsequent evaluations, program planning, or service delivery. For example, formating or monitoring files or cases, establishing data sources, and developing protocols for subsequent data collection are all part of any comprehensive evaluative effort, and should be construed as a positive spin-off effect or benefit of the evaluation.

A Model for Evaluating Rehabilitation Programs

The model proposed for evaluating rehabilitation programs has been developed, modified and field tested in a variety of HSO's (Holosko and Feit, 1981). It was successfully used in evaluating the JOB GENERATION PROJECT in St. John's, Newfoundland, and the results of its use in this context will be reported in the next sub-section of the chapter. The model is meant to serve as a comprehensive yet practical framework for conducting meaningful evaluations of rehabilitation programs. It rests on a number of assumptions which need specification and explanation.

Assumptions of the Model

The model is derived from four assumed components which are:

a) accountability;

b) autonomy;

c) methodology;

d) a community perspective

Program evaluations and those who conduct evaluations need to become more accountable to the respective programs they are evaluating. Implicit in this contention is that evaluations should be conducted in a co-operative, open and forthright manner with minimal disruption to the programs' operational functioning. Thus, program evaluations require accountability to clients, staff, the administration, the board and community if they are to evolve in meaningful ways. This is neither the time nor place for detracting anecdotes, however, I am sure that anyone who is familiar with program evaluations in the rehabilitation field, can recent episodes of evaluators (internal or external) turning the agency 'upside down' during the course of their evaluations. This model suggests the opposite, in that accountability between the evaluator and the program is a primary mechanism to avoid the potential for such evaluative chaos.

The likelihood of having a successful evaluation also increases with the degree of automomy accorded to the evaluator. In this regard, evaluators need sanctioning, administrative support, the authority to render important decisions, and literally 'room to roam' in order to conduct their evaluations. Such autonomy should be encouraged and extended at all points in the evaluative process: planning; conducting; or disseminating. Properly socializing the agency or program toward the evaluation, as well as trusting the integrity and abilities of the evaluator(s) makes this an easier task. A lack of autonomy accorded to the evaluator(s) may hinder the evaluation jut as the appropriate amount of autonomy can facilitate this process. Hopefully, as more and more rehabilitation programs evaluate themselves, these programs will begin to understand the relationship between evaluation outcome and the degree of autonomy the evaluator has in conducting the evaluation.

The third assumed component, methodology, reiterates the point that how we conduct program evaluations is as important as what we find in the evaluations. The literature in this area has been encouraging during the past decade, as increased attention has been focused on developing methodological strategies for evaluating rehabilitation programs in both the public and private sectors (Wolfensberger, 1976; Wolfensberger and Glenn, 1975; Moos, 1974, 1975; Frank, 1979; Evluation Research Society, 1980)). Regardless of what methodology is used, it should be sound from a research perspective and pragmatic from an operational perspective. This model discourages complex methodologies removed from the programs/agencies they purport to evaluate.

The final assumption of the model rests on maintaining a community perspective in the evaluation. There have been some instances where evaluators or evaluations have become carried away with the evaluation process, and have confused method with purpose. In this regard, maintaining a community perspective reiterates the purpose of the evaluation and forces the evaluator to stay focused. As well, some rehabilitation programs/agencies may have become inwardly focused HSO's, and they may have forgotten that the primary purpose of rehabilitation of any sort involves helping individuals adjust to their environments outside of the agency or program. Any rehabilitation program which is not 'community-conscious' is remiss, and ensuring that programs emphasize this perspective through service delivery and evaluations is important. In this regard, the model places a high priority on developing and assessing the community context and its relationship to the program.

The Model

The model has three components which include:

a) An Administrative Chronology;

b) An Assessment of Program Effectiveness;
  i) Using Baseline Client Data,
  ii) Using Program Effectiveness Data,

c) A Community Assessment

Each of these components are construed as mutually exclusive. Thus, rehabilitation agencies or programs may choose to conduct one, two or all of the above. It is recommended that all of the components are addressed, as this situation provides the most comprehensive evaluation possible. Each component of the model involves collecting data from different sources and uses somewhat different approaches or methods. For the most part, the majority of data collected by using this model are descriptive in nature. The model is presented as a practical and relatively effective way for rehabilitation programs to either evaluate themselves by using their own in-house resources, or to help guide or direct outside evaluators who are conducting evaluations in their respective agencies. An explanation of each component of the model will follow.

Administrative Chronology

It is important to systematically document the evaluation of the program from its onset until the time of the evaluation and beyond. So often, programs which have been thoughtfully planned and administered have not been documented from the standpoint of their history or growth. Many programs seem to evolve at their own pace and may change dramatically over time. For example, clients, and/or their problems may change over time, the program's purposes and functions may change, personnel may turnover, program goals and objectives may change, treatment protocals may change etc., all of which are good reasons why careful documentation of the program is important. Thus, through an administrative chronology one can be more precise in examining trends and issues in the history and development of the program, describe events as they occur, and attempt to explain why things happened the way they did; rather than the opposite, of trying to remember what transpired after years have gone by.

The administrative chronology has a twofold purpose:

1) it serves as a record of the program's growth and development which is important for internal management purposes and decision-making, and;

2) it builds in the potential for other programs (which are similar or different) to generalize issues and concerns and learn from each other. For instance, similar programs which are commencing would be able to speculate with some assurances about their futures, and this information may prove invaluable for program

planners, administrators, key decision-making, or front-line staff.

In reality, the administrative chronology is akin to an old fashioned history-taking, as it involves systematically recording the events of the program by using some sort of common sense format. Its approach is descriptive and qualitative, and it is not meant to be complex or burdensome. The format one chooses for this purpose should be:

1) administratively focused;

2) simple;

3) chronological in its orientation; and

4) directed toward major events occuring in the program. Figure 1 represents a sample format of an administrative chronology based on a monthly time frame.

FIGURE 1

A Sample Format of an Administrative Chronology

Month-	Major Decisions Made Regarding			
Major Events Which Transpired	Policies/ Procedures	Service Delivery	Personnel Budget	Comment
1.				
2.				
3.				
4.				

As indicated in Figure 1, each event would be vertically listed in the first column and then tracked horizontally across each category listed. Thus, over the course of the year, at least 12 such forms would be accumulated, after which the information could be readily assembled, categorized, or analyzed for a variety of purposes.

It is recommended that one person in the program, such as a supervisor, administrator, manager, member of the board etc., be assigned to this task. This person should:

1) have an administrative vantage point in the program;

2) be relatively non-judgemental and objective;

3) possess concise writing skills; and

4) be involved in the day-to-day operations of the program.

It is important to note:

1) that this is a brief not elaborate history, thus policy/procedural manuals, minutes from meetings, grant reports etc., are construed as either source or supplimentary materials for this account, and;

2) that this is an administrative chronology, thus one should highlight the main administrative events which affected the program in these areas.

Such a record is invaluable for both internal management purposes, as well as any program evaluation which may be conducted in the future.

An Assessment of Program Effectiveness

Every evaluation must include an assessment of whether the program is working or not. Thus, program effectiveness, and/or efficiency must be determined in some way. To be clear about these concepts, effectiveness refers to some sort of tangible outcome accrued due to the program participation by clients, staff or community members. Examples include: client progress, benefits or consequences; client perceptions; client flow; units of service delivered in a time period; staff performance; resource utilization; community impact or response to the program; client, staff, community attitudes or opinions, etc. Efficiency simply attaches some attribute, usually a resource such as time, and/or money, to these outcome criteria. Thus, effectiveness criteria must be ascertained first, then efficiency criteria are subsequently determined.

The process of determining program efficiency is more complex than meets the eye, is highly subjective and idiosyncratic to either the program itself or the effectiveness criteria selected, and is usually not generalizable across agency or program. Therefore, it is recommended that this task be left to evaluation researchers, who with their knowledge, skills and expertise can better determine program efficiency. This model however, attempts to determine program effectiveness, which in and of itself may be more difficult than one might assume. It focuses on two areas for assessing program effectiveness, namely by using client baseline data and, by using actual program or service delivery data.

1) **Using Client Baseline Data**

All programs must collect data about their clients. This usually occurs minimally upon intake and discharge. However, data may also be collected at different times and for a number of different reasons such as: pre, during and post program participation; to satisfy operational protocols; for specific purposes such as research, annual reports, grant proposals, program planning, public relations etc.; after program discharge for follow-up purposes, etc. The point is that programs collect data about their clients either before, during and after rehabilitation, and agencies must learn to collect data at times which are both relevant for program planning and internal management purposes, as well as program evaluation purposes.

Many agencies and program staff will indicate that they are frustrated by data collection, and the tasks of report writing, and recording information about clients, etc. Many will also indicate that they do not understand why they must be further burdened with this task, as they see no use for the information they have already collected. The rationale for data collection about clients and its relationship to program planning, service delivery and program evaluation could be the subject of another paper or even textbook. Suffice to say at this point in time, that rehabilitation programs could use help, and are moving toward getting more help in streamlining the process of collecting meaningful data about their clients which is easy to collect, retrievable, and serves a variety of purposes. For purposes of this model, it is recommended that client baseline data be collected:

1) at intake or admission;

2) upon discharge or annually - whichever comes first; and

3) at follow-up, or at some point in time after discharge which makes reasonable sense to the program.

Collecting baseline data as such implies two things. One, that the same sort of data will be collected over time and used for comparison purposes (i.e. the clients serve as their own control or comparison group). Second, that the purpose of collecting baseline data is to determine or assess whether program participation make a difference in the rehabilitation of individual clients, when compared with themselves or others who are similar.

Client baseline data (CBD) takes the form of three types or levels, with each type or level building on the previous one. These CBD are:

(i) socio-demographic or background data;

(ii) program specific data; and

(iii) program goal data.

(i) Socio-demographic or Background data

The first level of CBD involves the standard admission-type data related to background descriptors or client profile data. These have been referred to as: admission data; intake data; background data; profile data; or basic data. Most agencies collect such information about clients and it takes the form of variables such as: name; age; race; sex; marital status; religion; socio-economic status; housing; health status; transportation status; family status, referral source, presenting problem, etc. This variable list goes on consistent with the type of agency and its governing policies, procedures and protocols. This form of CBD serves two important purposes:

1) it answers the question -- who are the clients we serve? and;

2) it provides the basis for meaningful sub-group analysis when later analyzed with other program evaluation data, e.g. do men fare better than women in the program?

(ii) Program specific data

These CBD are construed as additional descriptive level data which are specific to the program and services provided to the client. These data build on the socio-demographics in that they focus on information which is specific to the program goals and objectives. In some cases these data are mandated, in that the funding source requires they be collected. In other cases, programs or agencies collect these data in order to determine more information about their clients and their respective problems. Thus, in assessing these data over time, programs may be able to determine more about both the nature of their clients and their services, and the relationship between them. For example, alcohol rehabilitation programs may include assessments or measures of variables such as: attitudes toward drinking; consumption patterns; drinking behaviour; life history drinking profiles; troubles and consequences while drinking; alienation; depression, etc. Vocational rehabilitation programs may include assessments of: job skills; job readiness; attitudes toward work and leisure; employment history; vocational needs and aptitude; motivation toward employment, etc. Thus, if these types of data are systematically collected over time, a program could amass relevant descriptive information that could prove meaningful for a variety of purposes.

(iii) Program goal data

The final type of CBD which need collection, are related to the overall program goals, mission or purposes. Every rehabilitation program should have at least 3-4 goals which it is attempting to achieve through its objectives, the latter of which are now translated into actual services provided. These goals, usually transcend all of the objectives or services that the program offers in that they underline them, or provide the working framework for them. It seems critical, therefore, that such goals require periodic assessment for a few reasons. One is to determine if the program is achieving what it has set out to do. Second, is to determine the relationship between the service objectives and goals. For example, a major goal of an alcohol rehabilitation program may be to enhance the self-esteem of its clients. Thus, regardless of the services provided e.g. aversion therapy, family counselling, leisure time therapy, group therapy, etc., enhancing self-esteem is integral to all of these services. In this case, it would be important to assess or appraise client self-esteem from both the perspective of whether it is influenced by the program, and also to determine how services provided to clients (the objectives) relate to this overriding goal.

2) Using Program Effectiveness Data

Using program effectiveness data for evaluation purposes implies that one can collect and use data to assess program effectiveness. In order to accomplish this, effectiveness criteria must first be determined, then assessed. Both of these tasks may seem easier than one might assume, and pose a number of difficulties.

For example, let's take the issue of determining program effectiveness. The first point worth noting is that effectiveness criteria are highly subjective in nature, as either the program, and/or the evaluator decides on what they are. Thus, one program's effectiveness criteria may differ significantly from another program's, and the two comparable programs may indicate that they are both effective yet at the same time they are using vastly different criteria when they put forward this claim. Second, even if two comparable programs are using the same effectiveness criteria, they may be measuring them in very different ways. Hopefully, an appreciation for the complexities of readily determining program effectiveness is beginning to unfold.

In order to eliminate some of these types of problems, this model reduces the issue of program effectiveness to its simplest criterion form and poses the question - does the program work or not? To answer this question, three events must occur:

1) objectives need to be specified;

2) effectiveness criteria must be determined, and; and;

3) effectiveness criteria must be assessed.

Different from the program goals, the objectives become operationalized into actual services delivered to clients. More specifically, what services did the client receive, and how were these services provided? e.g. in actual units of service delivered. Regardless if the program is offering a 'salad bowl mixture' or variety of services to clients e.g. speech therapy, occupational therapy, life skills training, family counselling, etc.; or whether there are main blocks of service units delivered over time e.g. 12 weeks of self-awareness training, each service and its components need to be broken down into the number of units of service provided. For some examples of this procedure see Holosko & Feit (1981); Austin & Associates (1985); or Goldberg and Warburton (1979).

The next step involves determining the criteria to assess whether these services are effective or not. This task is more difficult than the previous one (specifying operationalizing service objectives) and involves consultation and dialogue between groups such as: the program planners; the providers of service; the recipients of service; the administrators of the program; the board of directors; community members; and the program evaluators. It is important that consensus effectiveness criteria emerge which will lend themselves to measurement. When determining effectiveness criteria, it is recommended that the key question -- does the program work or not? --- be reiterated. In this regard, keep effectiveness criteria simple and focused on this question. Examples of such criteria, presented in question form, include:

1) who received these services?

2) how were the services provided?

3) what benefits did clients accrue from receiving these services?

4) what problems were associated with delivering these services? and

5) what unanticipated consequences emerged from delivering these services?

Thus, seeking answers to these questions comprise determining program effectiveness. Individuals may wish to develop additional criteria to assess program effectiveness, however these are presented as the basic ones needed to determine the effectiveness of the program.

Finally, the issue of assessing these criteria is yet another matter. This involves an objective appraisal of the criteria, focusing on one or more targetted groups. Since this issue involves the methodology of the program evaluation, it is recommended that this task is best handled by those conducting the evaluation. However, it is important to note some of the general issues related to the assessment of effectiveness criteria. This is best considered from two perspectives: 1) who is being assessed?; and 2) how will the criteria be assessed?

In regard to the first question (who?) data may be gathered in primary form (e.g. collected from firsthand contact with a sample), or in secondary form (e.g. retrospectively from information/data already collected such as files, records, reports, minutes of meetings, grant proposals, etc.). Whether it is gathered in either form, foremost it must be accessable and retrievable. Further, most evaluations focus their primary data collection on one particular sample or sub-group e.g. clients, staff, administrators, community members. In this regard, it is important that such individuals be treated with respect and dealt with openly, honestly and straightforwardly during the course of the evaluation. As well, adequate safeguards to protect the human rights and confidentiality of the sample are imperative at this point. It is also important to thoroughly consider which sub-group(s) will form the basis of primary data, as their responses to the effectiveness criteria may vary considerably (e.g. from sub-group to sub-group). 'Dry runs', trial runs or pre-tests are helpful in this regard.

In regard to the question of how the criteria will be assessed, the methodology may take a variety of forms. It is recommended that standardized approaches, measures or appraisals be used whenever possible as their reliability, validity and generalizability are more scientific than individually constructed assessments. It is also recommended that regardless of the methodology employed, the simpler the better, and the more descriptive the better when the data eventually becomes actually analyzed and presented for interpretation.

Community Assessment

The final component of the model includes conducting research in the adjacent community the agency or program purports to serve. This research may take the form of a variety of designs e.g. survey research, quantitative-descriptive studies, needs assessments, population descriptive studies, exploratory investigations, etc., employing a variety of methodologies e.g. face-to-face interviews, mailed surveys, telephone surveys, opinion surveys, trend analyses, analyses of secondary data, qualitative approaches, epidemiological approaches etc. As well, many groups, sub-groups, or samples may be used in such investigations e.g. households, families, clients, populations at-risk etc. These designs and methods assume research expertise, therefore, community assessments should be conducted by those who have some demonstrated expertise. Regardless of the type of assessment conducted, it should be focused toward obtaining relevant descriptive level information which should have a purposely distinct relationship to the program or agency. The three main purposes of community assessments include: planning; assessing program impact; and following-up on clients either during the program or upon discharge.

Community assessments used for planning purposes are usually conducted at the onset (e.g. planning/development type studies), prior to the commencement of the program (e.g. needs assessments), or after the program has been operational for a period of time to assess whether the goals and objectives are operationalizing themselves the way they were envisioned. In this context, a community assessment could also be useful for determining future plans for the program e.g. its organizational life, survival, possible changes, termination, etc.

Community assessments which determine program impact are focused at one or more of the following: 1) determining the nature of the program's impact on the community; 2) determining the relationship of the program to the community, and vice versa; and 3) determining feedback on one or more aspects of the program which have a community context. Examples of the latter might include assessing job availability for vocational rehabilitation clients, or assessing transportation services for mentally retarded clients in an independence training residence in the community.

Finally, community assessments may be directed at following-up on clients in the community either while they are still in the program or after they leave the program. These assessments attempt to determine if the program is making, or has made a difference. Every rehabilitation program operates on the principles of community integration (or re-integration), client autonomy and independence, and helping with the 'goodness of fit' between the person and his/her environment. It is crucial, therefore, to seek follow-up assessments in order to determine answers to issues related to these principles.

In sum, it is recommended that all program evaluations of rehabilitation programs include a community assessment consistent with the types previously mentioned. Those programs which evaluate themselves and do not include this component are seriously remiss in having a comprehensive evaluation.

A Case Example: Program Evaluation of the Job Generation Project in St. John's, Newfoundland

Background and History

The JOB GENERATION PROJECT in St. John's, Newfoundland was funded under contract by the Canada Employment and Immigration Commission (CEIC) and supported and operated by the National JOB CORPS PROGRAM of the YM-YWCA. Both of these agencies sponsored the project as they had compatable mandates in the area of youth unemployment. More specifically, the National YM-YWCA was committed to establishing a JOB CORPS program in ten Canadian cities (of which St. John's was the first) to work with severely employable disadvantaged youth between the ages of 15-24, and to set up effective training and work experiences to help these youth become employable. CEIC's mandate was to provide severely employed disadvantaged individuals with the necessary preparation and employment related skills leading to labour market readiness.

The PROJECT received funding from CEIC in February 1984, for an initial five month planning and development phase. In July 1984, based on the success of this phase, the PROJECT was formally initiated and is still operational today. The PROJECT was housed in the St. John's YM-YWCA facility and was staffed (over time) by eight personnel who were for the most part full-time employees. these included an executive director hired at the onset of the project (in February); a project director; an administrative assistant; and five employment counsellors or program co-ordinators (added on as the program became operational). An advisory committee of community representatives was established at the commencement of the project and has played an active role in its growth and development to date.

The actual program was operationalized and time framed in five month sessions with participants entering and completing the program during this time period. These sessions were further broken down into six components, each of which took two to four weeks to administer. These components were:

1) Intake/Screening and Assessment;

2) Life Skills/Job Readiness;

3) Career Awareness;

4) Job Readiness;

5) Community Placements; and

6) Career Counselling.

The interventions used included:

1) a heavy emphasis on education in the form of lectures, films, computer application, guest speakers, role-playing, simulation exercises, etc.;

2) group counselling in small groups of ten or less;

3) individual counselling; and

4) family counselling, when needed.

Two five month sessions (Sessions 1 & 2) have been administered to date, and essentially two waves of clients have passed through the program. Session 1 had 22 individuals or program participants, and Session 2 had 33 participants. As a single cohort, the participants ranged in age from 16-22 years; 75% were male and 25% were female; all were unemployed; all satisfied the eligibility criteria of the funding source; all lived proximal distance to the program; and all generally completed the program after commencing it (95% of the cases).

The evaluation model previously described was introduced by the author who was a member of the PROJECT'S Advisory Committee. Thus, as the PROJECT was in its planning and development phase, the evaluation component was built in to it. Neither sponsoring agency (the National YM-YWCA or CEIC) had developed specific guidelines for the evaluation component, however both requested an evaluation. As a result, the model previously presented, was adapted, modified and refined over time, and was used in the two subsequent evaluations of the PROJECT (following Sessions 1 and 2). To date, the National YM-YWCA is considerably adapting the model for use in other JOB GENERATION PROJECTS across the country.

Administrative Chronology

A detailed administrative chronology was written for each evaluation (that is for both Sessions 1 and 2). It was completed by the executive director of the PROJECT in consultation with the National YM-YWCA JOB CORPS liaison person, the executive director of the St. John's YM-YWCA, and the regional project officer of CEIC. The chronology simply tracked major administrative events of the PROJECT on a monthly basis using a version of the suggested format as outlined in Figure 1. To report on the wealth of data derived in the chronology would be futile, inappropriate at this point, and would not be of much interest, as much of the data were idiosyncratic to this program.

The evaluation report of either Session 1 or 2 are available from St. John's YM-YWCA GENERATION PROJECT.

It may be helpful however, to select some relevant examples of key administrative events which occurred during the planning and operational phase, to illustrate how such a chronology was used. These events are illustrated in Table 1.

Table 1 presents only a small amount of the data recorded by using the chronology format. It also points out the usefulness of such data for both internal management as well as program evaluation purposes. For example, in regard to internal management, entitled (See 'Personnel/Budget in Table 1), such programs would be wise to build in additional consultation monies into their proposed budgeted expenses. In regard to program evaluation issues, the most recent event listed in Table 1 (re: efficiency criteria), would suggest that efficiency criteria were difficult to ascertain and made little sense, even though they may be preferred by the funding source. The final point to be made about the administrative chronology is that it serves a number of useful purposes, it is not that time consuming to complete, and has generalizable data which are important to other agencies or programs. Assuredly anyone planning a similar program would appreciate a number of systematic chronologies to examine first.

Assessing Program Effectiveness

1. Using Client Baseline Data (CBD)

CBD were collected:

1) before and after each five month session;

TABLE 1

Selected Events from the Administrative Chronology of the St. John's Job Generation Project Evaluation

		Major Decisions Made Regarding			
Date	Events Which Transpired	Policies/Procedures	Service Delivery	Personnel/Budget	Comment
Planning Phase					
1. March 1984	Recognition that no data or statistics were available on the # of unemployed youth in St. John's.	-conducted a needs assessment, telephone survey and liaised with community agencies	-need data about services in community	-sought research consultation	-problem not unique to St. John's -how do you plan without data? -information shortage is a reality of such programs
2. May 1984	No model for service delivery was made available - had to develop our own	-first reviewed literature -needed the service model to emerge from eligibility criteria and goals and objectives	-defined goals and objectives and operationalized into services	-sought educational program consultation	-can we develop a regional model which is unique? -considered a # of alternative models with advisory committee e.g. education, prevention, direct service -funding sources are flexible about what we do
Operational Phase					
3. July 1984	Locating clients was more problematic than anticipated	-need for more community liaison and education -need for P.R.	-must develop creative strategies and take initiative -screening applicants is inevitable part of service delivery	-add brochure and mail out costs to budget	-unanticipated problem -need to develop program's profile in community and liaise more with potential referral agencies
4. Oct. 1984	Could not develop meaningful efficiency criteria for planning and evaluation purposes	-emphasize effectiveness in policies and procedures	-all goals and objectives must be broken down and measurable	-contracted for evaluation research consultation	-perennial problem of such agencies e.g. how do you attach $ to enhancing someone's self-esteem?

2) at the end of each program component in the sessions; and

3) upon a six and twelve month follow-up after completion of the program.

Pre and post CBD were collected at admission, during the two week intake/screening and assessment, and then after the five month session. Admission CBD included a standard list of socio-demographic variables, as well as an appraisal of whether clients were program eligible or not. The CBD collected during the intake/screening period and then again upon program completion were program specific data (see page 20). Thus, they were additional descriptive level data specific to both the participants and the program. These data were administered in the form of standardized tests for the most part. The variables assessed and criteria used were as follows:

1. Interpersonal Skills - During the two week assessment period participants were observed by specific employment counsellors who were assigned to respective participants. The following criteria were used in this judgement: communication ability and skill; caring and sharing and sensitivity to others; appropriateness of behaviour; verbal skills; and interactive exercises.

2. Written Language Assessment - Assessed by a specific employment counsellor who was assigned to a respective client throughout the program. Criteria used were: the written application for participation in the program; a written statement of the participant's motivation for employment; numerous homework assignments which required writing; a job application and resumé and written abilities as

demonstrated on the tests used in the pre and post assessments.

3. Reading Comprehension - The Peabody Individual Achievement Test (PIAT) was used (Burros, 1972).

4. Self-Esteem - The Index of Self-Esteem by Walter W. Hudson (1982).

5. Family Relations - The Index of Family Relations by Walter W. Hudson (1982).

6. Alcohol Problems - The Short-Form Michigan Alcoholism Screening Test by Selzer et. al (1975).

7. Alcohol Consumption - The Addiction Research Foundations' (1979) brief quantity, frequency and volume measure of weekly alcohol consumption.

8. Attitudes Towards the World of Work - A seventy-five item scale broken down into sub-dimensions: preparation of schools; diligence; view of employers; confidence in succeeding; attitudes toward unemployment; and general attitude towards earning a living (Province of Alberta, 1981).

The first two assessments above (Interpersonal Skills and Written Language Skills) were rated as either: 'satisfactory'; 'unsatisfactory'; or 'needs improvement'. The other assessments had standard scores and were statistically computed in pre and post test fashion, and then the scores were compared. Significant positive changes were noted in: Interpersonal Skills; Written Language; Reading Comprehension; Self-Esteem; Family Relations; and View of Employers (part of Attitudes Toward the World of Work). The other measures remained the same for the most part and did not change significantly with the exception of alcohol consumption, which increased over time. This finding was later explained by pre-test anxiety which contributed to the initial underreporting on this measure by the participants. Upon each administration of this battery, the staff learned how to sequence and administer the tests in a more streamlined way, and how to use specific data from the tests within the context of the services or programs they were offering participants. It should be noted, that having one counsellor assigned to a cohort of participants to both test and follow through the program greatly facilitated this process.

At the end of each program component (e.g. Life Skills, Job Readiness, etc.) during the five month session, participants were asked to provide feedback about the component completed. This feedback took the form of a three to four page rating inventory which assessed specific criteria. The criteria rated were: physical environment and facilities; content; instruction; and, teaching methods used. A list of the range of teaching methods used were analyzed and rank ordered in terms of degree of preference. These data, related to the program components of Session 1, are reported in Table 2.

TABLE 2

Preferred Teaching Methods Used in the Various Program Components of Session 1, Ranked in Descending Order (_n_=21)

Ranking	Teaching Method Used
1	Audio-Visual Taping and Playback
2	Small Group Discussion
3	Role-plays
4	Computer Programs
5	Audio-Visual Tapes
6	Interactive Exercises
7	Brainstorming
8	Guest Speakers
9	Films
10	Lectures

As a result of the findings in Table 2, more audio-visual taping and playback, small discussion and role-plays were built in to subsequent sessions. Similarly, better quality guest speakers, films, and lecture materials were sought for future sessions. Thus, the usefulness of these data for immediate program planning is clearly illustrated. Consequently, the subsequent session(s)' data in this regard was re-evaluated and used for similar planning purposes.

As indicated, each program component of the session was rated in terms of degree of relevance and importance as perceived by the participants. A list of the program components for Sessions I and II are rank ordered in terms of degree of preference, and these data are reported in Table 3.

Once again, on the basis of the information reported in Table 3, program planning and decision-making was greatly facilitated.

The final type of CBD were follow-up data on participants who completed the program and were contacted six months and twelve months later. Due to the time framework and the recency of the program, the twelve month data are not fully collected or analyzed at the time of this writing. The main focus of these CBD were:

TABLE 3

Preferred Degree of Importance of the Various Program Components of Session 1 and 2 Ranked in Descending Order (n=54)

Ranking	Program Components
1	Career Awareness
2	Job Readiness
3	Career Counselling
4	Job Placement
5	Individual Counselling
6	Life Skills
7	Use of the YM-YWCA facilities*
8	Intake and Assessment

Note (*) Participants were given YM-YWCA privileges while they were attending the program.

1) to assess the participant's progress and compare it to when he/she was prior to entering the program;

2) to retrospectively determine what the participant got out of the program; and

3) to determine whether the program made a difference in their ultimate employability.

These data were collected by using a set of structured and open-ended questions administered to clients by mail or by telephone.

The six month data revealed that participants perceived the program did make a difference in the areas of: self-confidence; communication skills; preparation for employment; and career aspirations. In regard to the latter, participants revealed that the program helped them understand more about themselves and what they needed (e.g. additional education, skill training, etc.) in order to pursue meaningful careers of choice. It is recommended that if follow-up CBD is being considered by rehabilitation programs, one way of ensuring an adequate response rate (after a time lag) is to inform the participants while they are still in the program, of the forthcoming research.

2. Using Program Effectiveness Data

Program effectiveness was determined by assessing goals and objectives in a systematic fashion. Overall PROJECT goals and objectives were determined by first referring to the mandates and criteria established by the funding source and the support agency. Both the CEIC and YM-YWCA provided very broad and vague criteria which could be interpreted programmatically in a variety of ways. When these agencies were confronted with this issue by the executive director of the PROJECT, both deflected the issue back to the PROJECT, and indicated that they purposely provided broad and vague criteria in order to facilitate regional initiatives and program diversity. This logic seemed reasonable from their point of view, however it still posed a dilemma for the PROJECT, in that it had to develop and interpret concrete goals and objectives for both its management and inevitable evaluation. If there is one major point to be made about this issue, it is that program directors/ managers should have a good rapport and liaise frequently with their funding sources, so that programs do not become too removed from their purposes or mission.

Over time, the PROJECT developed goals and objectives which were agreeable to both agencies. As previously indicated, the PROJECT developed specific program components (see Table 2) which were time framed and fairly mutually exclusive of one another. During the planning phase, it was recommended by the Advisory Committee of the PROJECT, that one staff member become responsible for co-ordinating and essentially overseeing each program component. Both the structuring and administering of the program components in this way greatly facilitated the evaluation process.

When it came time to evaluate Sessions 1 and 2, the groundwork had already been laid. Each staff member, who was delegated to co-ordinate a program component, was also responsible to evaluate it. Thus, familiarization with the peculiarities of the program component was viewed as a strength that enhanced the evaluation. The possibility of biased judgements (either pro or con) were reduced as the executive director liaised closely with each staff member, and reinforced the importance of objectivity in this process. The use of a standardized assessment format also tended to reduce the potential for bias creeping in to the process.

Thus, each program component was evaluated in the same way. The method of assessment involved the following steps:

1) specifying the primary goal of each program component;

2) specifying a minimum of 4 objectives (in the form of services) to meet this goal;

3) assessing whether the goal and objective were met; and,

4) candidly commenting on any issues related to this process.

After this process was completed for each component, the entire staff discussed and reviewed the findings to ensure their accuracy and provide additional input into the respective assessment. As a result, different combinations of goals and objectives were met for each program component. For example, in one component, the goal might not have been met but two of the four objectives may have, etc. Figure 2 provides a hypothesized example of how the relationship between goals and objectives were assessed.

FIGURE 3

A Hypothetical Example of Assessing Goals and Objectives of Components in a JOB GENERATION PROJECT

PROJECT COMPONENT	GOAL		OBJECTIVES					COMMENT
	Yes	No	1	2	3	4	5	
1. Intake/ Assessment								All objectives fulfilled
2. Life Skills								Objectives 2 & 3 need fulfillment to reach the goal
3. Career Awareness								Still need to work at reaching objective #3
4. Etc.								

Figure 3 illustrates how a matrix of goals and objectives could be used to understand which ones are being achieved and which are not. This is useful for internal management purposes, in that managers of such programs can pinpoint areas of program success and also areas which require more attention, and then render decisions for future program planning. It should be noted that each time staff members engaged in this process they became more attuned to its relevance to the PROJECT. And quite simply, the more they did it, the better they got at it.

Community Assessment

As previously indicated, the community component was intricately built in to the PROJECT in a number of ways. For example, the PROJECT was developed and operationalized as a community-based and community serving effort which was contingent upon the community for its survival e.g. its clients, supporting agencies, job placements, etc. Thus, the PROJECT evolved considerable visability in the community, and over time, the following transpired: increased public profile; media exposure; increased community liaison at a variety of levels e.g. schools, agencies, employers, etc.; the development of a brochure and information packet; the development of a community resource library, etc. Although it would have been nice to assess all of these community activities, the PROJECT chose to focus only on those issues which were:

1) relatively simple and not time consuming; and,

2) could be used for program planning and decision-making.

It is recommended that programs or evaluators re-echo these two premises prior to embarking on any community assessments.

The three community assessments which were conducted included:

1) the initial planning needs assessment (see page 33), which was fairly informal;

2) the follow-up six and twelve month assessments of clients who had completed the program (see page 40); and

3) a formal assessment of the Job Placement component of the PROJECT. Since the latter is the only one which has not been described, it will be explained at this point.

Each job placement setting was assessed after the participants completed their eight week placements in both Sessions 1 and 2. Both the job placement supervisors (i.e. those who directly supervised the participant), and each participant was assessed. The assessments were conducted approximately 1-2 weeks after the placement, and were independent of one another. Since the PROJECT was involved in training individuals for eventual employment in the market place, the assessment of the Job Placement component was crucial to the overall PROJECT.

Job placement supervisors were assessed by using a semi-structured, pre-tested interview schedule which included both open and closed-ended questions, and took about an hour to complete. The major areas assessed were:

1) background information;

2) job description information;

3) attendance;

4) punctuality;

5) respect for policies and materials;

6) employee attributes, e.g. appearance, communication skills, attitudes toward work, etc.;

7) worker relationship;

8) the work process;

9) evaluation of the PROJECT relevance and structure; and

10) desirability for hiring the participant.*[1]

The participant assessment was a three page closed-ended feedback form which assessed:

1) PROJECT preparation for placement;

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*[1] For the complete interview schedule or questionnaire contact the Executive Director JOB GENERATION PROJECT, St. John's YM-YWCA, St. John's Newfoundland, A1A 2X3.

2) overall satisfaction of the experience;

3) feedback from supervisors;

4) the usefulness of pre-placement visits;

5) opportunities to integrate learning experiences;

6) future employment possibilities; and

7) length and timing of placement. This assessment was conducted individually by each participant and took approximately 10-15 minutes to complete.*2

Highlights of the results of both of these assessments will be presented.

The JOB Placement assessment data from both Sessions 1 and 2 were very favourable toward the participants specifically, and the PROJECT in general. The first finding of interest was that the range of variety of employment placements offered was a positive program feature. More specifically, through pre-placement visits, participants were able to select employment settings that coincided with their interests and needs. As a result, the employers indicated that for the most part, the individuals placed with them were highly motivated, eager to learn, co-operative, punctual, and legitimately interested in their jobs, as they hoped to become employed in the placement settings or related ones. As well, 90% of the participants who commenced the eight week job placement completed it. Of the five who didn't: three left due to medical or personal reasons; one was dismissed due to excessive absenteeism; and one was dismissed due to incompetence. In reality, these data suggest that the program only failed in this regard in 2 of 51 or 4% of the cases.

More importantly, 75% of the participants were employed three months after the job placement. Fifty-percent were employed in full-time positions; 20% were part-time or temporary positions; and 5% were in casual positions. The majority of employers either hired the participant directly from the placement or were

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*2 For the complete interview schedule or questionnaire contact the Executive Director JOB GENERATION PROJECT, St. John's YM-YWCA, St. John's Newfoundland, A1A 2X3.

instrumental in getting them hired e.g. through business contacts, information, or reference letters. The case example of John, a participant in the PROJECT illustrates the typical participant in the JOB Placement component. This case was taken directly from the evaluation of Session 2.

A Case Example - John

John was interested in the cooking profession as a career upon entering the PROJECT. He expressed this interest to the placement coordinator. In attempting to arrange his placement and interview, special consideration was given to John's request for a placement in this area. John had three interviews with food service establishments. He decided upon a setting which would provide him with the best experience which could enhance his chances of being accepted into a cocking course.

John's position with Acme Catering was as a cook's helper. He was very interested in his work and enjoyed it especially during the first half of placement. Although his work progress was slow, this was an area that would improve with time. John was very punctual at work and while there he did a good job. In considering John's overall performance during placement, Acme Catering indicated that he would be an asset to their company, and they would hire him if there were any positions available. Unfortunately for John, there were no positions available at Acme Catering. During his placement John was observed by his employer as willing to discuss the progress of his work with, both his supervisor and employment counsellor during bi-weekly visits. The following are the employers' rankings of John's performance on a scale ranging from 'very poor', 'poor', 'average', 'good', 'excellent'.

- following company rules, regulations, and policies (good)
- getting along with co-workers/supervisors/ customers (good)
- following directions of his supervisor and completes assigned tasks (good)
- quality and quantity of his work (average-good)
- punctuality for work and while at work (good)
- appearance at work (good)
- ability to understand and follow instructions (good)
- absenteeism wasn't a problem
- showing proper respect for tools, materials and products (good)

- the degree to which he enjoyed his work (good)
- personal motivation to complete task without continuous supervision (good)

Upon completion of his placement, John returned to the PROJECT for the final three week career counselling section. During this time period, John actively pursued employment and career education related to his placement. For example, he gathered information about cooking programs offered in the city; and examined requirements and program content of such courses. John also applied to the Canadian Armed Forces to pursue a chef's/cook's career and is presently on a waiting list there. John did obtain a job with a local luncheon restaurant which was to start in mid-August. Unfortunately, business had slowed down considerably, and the luncheon restaurant was no longer able to hire him. John hasn't given up hope and he is actively seeking employment from other cooking related businesses where he could acquire his needed apprenticeship training.

Finally, in regard to the participant's assessment of the Job Placement component, the majority of participants deemed this to be the most beneficial and enjoyable part of their overall learning while in the PROJECT. The great majority (over 80%) indicated: 1) that the PROJECT adequately prepared them for their work experiences; 2) that the work placement provided them with the opportunity to learn and practice what they learned in the classroom; and 3) that the Job Placement experience was extremely helpful in helping them find future employment. The only limitation noted by the participants about this PROJECT component was that it was too short a time period. Again, all in all, the great majority endorsed it as a worthwhile experience.

In conclusion, these two examples of community assessments are recommended as relatively simple, straightforward and meaningful ways to assess how the program relates to the community and vice versa. Their importance to the PROJECT'S program planning and decision-making structures proved invaluable. Hopefully program managers, administrators or evaluators will provide meaningful community assessments of this nature in their respective program evaluations.

Summary

This paper was written to assist program managers, administrators, line-staff, board members or evaluators understand the salient issues involved in evaluating rehabilitation programs. The primary contention is that it is as important to learn how to conduct evaluations in rehabilitation programs as it is to report what was found in such evaluations. As a result, the pages outlined: specific pre-requisites for program evaluation; described a model for evaluating rehabilitation programs; and, used the case example of the St. John's JOB GENERATION PROJECT to show how the model was, and could be used. This paper describes simple, yet effective ways to meaningfully evaluate rehabilitation programs.

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RESEARCHING PRACTICE: AN EXAMINATION OF TEN YEARS OF SPECIALIZED TRAINING FOR MODERATELY AND SEVERELY MENTALLY HANDICAPPED ADULTS[1]

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Introduction

Recent research (Groeneweg, Brown, Conway & Tighe, 1986) indicates that adults with increasingly severe levels of handicap are making application to, and subsequently being accepted into, community-based programs. This, combined with a failure by many of these individuals to achieve placements in the community at large which are free from or independent of social support systems, has precipitated the development of a wide variety of specialized training initiatives to accommodate the unique learning needs which these individuals demonstrate.

These initiatives range from the relatively straightforward application of principles and approaches acquired from the learning literature, for example, simple bicycle brake assembly (Gold, 1972, 1973); to the development of entire program systems based on developmental approaches to re-habilitation, for example, the Portage Project (Shearer & Shearer, 1980).

While reports of the successful application of various training strategies and approaches are seen relatively frequently in the published literature, such reports are typically based on special project interventions involving specially trained personnel operating under controlled conditions or utilizing enriched staffing models which are atypical of the majority of community based service systems. Even the presence of a single research assistant involved solely in observation and event recording or test administration can be a major alteration from typical training environments. Indeed, in a recent study of the distribution of practitioner time (Groeneweg & Vrbancic, 1986), it was found that vocational trainers spent less than 10% of their time involved in direct interaction with clients. Hence, it is uncertain the degree to which training strategies could be successfully applied in typical environments even if the intent was present. Furthermore, even in environments which are both supportive in principle and capable in practice to the implementation of these strategies, it is unknown the extent to which rehabilitation personnel even attempt to actively apply the instructional technology which is currently available.

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Nonetheless, in those instances where application has been promoted and has been maintained on a longstanding basis, it is important to evaluate the effectiveness of that application. Such evaluation must distinguish those variables which relate to the handicapped persons themselves, from those which relate to the system(s) established to remediate those person-centered components. Furthermore, it must also include the long-term effects of those interventions before support can be given for their protracted or wide spread use. This information is necessary so that program implementers can ensure that all the conditions necessary for effective program transfer are in place before new approaches are wholistically adopted from the rehabilitation literature.

The remainder of this paper looks at one example of a long-term program of intervention which operated both within the context of active research and, at a later time, in the context of ongoing program operation without the research component.

Program Description

This program was provided for the moderately to severely mentally handicapped adult at The Vocational and Rehabilitation Research Institute, Calgary over the ten year period January, 1973 to March, 1983. This program, hereafter called Pre-Vocational Training, involved the provision of individualized and small group training in the areas of attention, personal adjustment, communication and language skills, social and educational skills, physical fitness, motor dexterity and basic vocational skills (Brown & Hughson, 1977). Acceptance of an individual into the program was typically based on a broad clinical evaluation of need determined both by a general lack of the functional skills required for independent functioning, and by a demonstrated lack of performance success in the existing vocationally-based training programs. Exit from the program, for reasons other than family moves out of the city, etc., was similarly determined by a general clinical decision based on a combination of the achievement of specific training objectives by the participant and by his/her readiness for existing programming components elsewhere within the Institute.

One aspect of the specialized training program which is of particular relevance to questions concerning the generalizability of finding and procedures derived from structured research programs, is the fact that the program operated within the context of an intensive research component through the first four year period 1973 to 1976, inclusive. During this phase the curriculum or program of instruction was being developed, implemented, monitored and modified as necessary. In addition, regularly scheduled assessments were completed by research personnel--in part to satisfy the requirements of the research contract. Out of the program development and assessment components were developed a series of assessment and training packages (Hughson, Berrien & Brown, 1977) which formed the basis for ongoing service. Positive results from this RESEARCH phase (Hughson, Berrien & Brown, 1977) led to the continuation of the program on an ongoing operational basis.

This operational (POST-RESEARCH) phase was characterized by the relatively routine implementation of the prepared program packages by program staff in individualized and small group training formats. Periodic assessments also occurred during this phase, but were of a less frequent nature (one per year as opposed to every six months) and were completed by the program staff themselves. No new program initiatives were undertaken during this phase, although, as with the RESEARCH phase, each individual participant tended to have a relatively individualized arrangement of program elements.

The present data, therefore, examines a combination of the short-term and long-term effects of the program by comparing individual client performance on a variety of adaptive behaviour and psychometric measures taken before, at the end of, and at a follow-up period after participation in the specialized program both during and after the explicit research phase.

Procedure

All individuals who had participated in training within the Pre-Vocational Training Unit at the Institute between January, 1973 and March, 1983 were considered potential subjects. All information regarding sex, age, dates of entrance to and exit from the program, as well as performance on selected measures of cognitive, linguistic, and adaptive functioning was obtained from the central clinical file maintained for each individual.

Specific performance data were obtained for the Peabody Picture Vocabulary Test (Dunn, 1959), Raven's Coloured Progressive Matrices (Raven, 1965), and the Adaptive Functioning Index - Social Education Test (Marlett, 1976). Performance measures were obtained for those points in time which were within two months of entry to the program (PRE), within two months of exit from the program (POST), and an average of 63 months (SD = 33.06) after post-program evaluation (FOLLOW-UP). This latter data point was utilized to evaluate whether each individual subsequently retained or lost skills after participating in the program, or whether any skills which were not demonstrated either before or immediately after participation in the program were subsequently acquired in the post-program environment.

It should be noted that because of the relatively extensive time period over which the test information was collected, tests at each of the three time periods were usually administered by different testers. It was assumed that the effects of different testers were equivalent across program conditions and time periods.

RESULTS

Over a ten year period a total of 85 individuals received the specialized intervention provided by the Pre-Vocational program. Using the foregoing time frames, complete data on either the Peabody Picture Vocabulary Test, Raven's Coloured Progressive Matrices or the Adaptive Functioning Index - Social Education Test for the PRE-, POST- and FOLLOW-UP periods was available for only 34 of the 84 individuals. During the first four year period, that is over the course of the RESEARCH phase of the program, 18 of these 34 individuals entered and exited the program before the research phase was complete[1]. Eleven individuals participated exclusively in the latter 6 year POST-RESEARCH phase of the program[2]. Therefore, the remaining five individuals entered the program during the research phase and continued on in the program into the post-research, six year period. However, due to the small number of individuals who participated in both phases (n = 5), these data were excluded from all subsequent analyses.

In total, therefore, 29 individuals for whom complete data on at least one of the test measures for all test periods could be obtained, were included in the study. The five individuals who overlapped both phases had been excluded. In order to rule out the possibility of sampling bias due to selective sample loss, individuals who were not included in the study were compared to individuals included in the study if either group had complete pre-PPVT data. Pre-PPVT scores were available for 42 individuals not included in the study, and for 22 individuals that were included in the study[1,2]. A one way analysis of variance indicated that the two groups did not obtain significantly different PRE-PPVT scores ($p > .01$). The mean mental age (MA) equivalent PPVT score for individuals not included in the study was 6.30 (SD = 2.58). The mean MA equivalent PPVT score for individuals included in the study was 7.07 (SD = 2.71). Therefore, there does not appear to be any sampling bias in the data.

Mental age equivalents at the PRE-test period for all individuals included in the study, ranged from 2.83 to 13.92 years. Data for the mean age at time of entry to the Pre-Vocational program and mean length of time in the program itself for the RESEARCH and POST-RESEARCH groups are summarized in Table 1.

Since data were collected at three different points in time from all participants, an analysis of covariance was employed in which both the time interval between tests and the level of the PRE-tests were used as covariates. The analysis of covariance indicated that the time difference between tests had an equal effect across participants and tests ($p > .01$) and that the level of the PRE-test accounted for a significant portion of the variance in test performance ($p > .01$). Therefore, subsequent analysis involved simple comparisons of performance for each individual on the different measures taken before program onset (PRE), after program exit (POST), and at FOLLOW-UP.

Table 2 presents the means and standard deviations for PRE, POST, and FOLLOW-UP program performance for the RESEARCH and POST-RESEARCH groups. The summary tables

TABLE 1

Age and Program Length for Research and Post-Research Groups

	RESEARCH (n = 18)	POST-RESEARCH (n = 11)
Mean Age of Entry (months)	289	251
Standard Deviation	97.40	52.62
Range	196-616	180-365
Time in Program (months)	21	28
Standard Deviation	15.29	17.23
Range	5-56	6-62

for the analysis of variance comparing PRE- and POST-program performance, POST and FOLLOW-UP program performance, and PRE- and FOLLOW-UP program performance on the three different dependent measures are presented in Tables 3 - 5, respectively.

The analyses indicated that, regardless of the group, performance on the PPVT was significantly better at POST-program evaluation relative to PRE-program evaluation ($p > .01$) and this improvement was still evident although not significantly different, at POST- and FOLLOW-UP program phases ($p > .05$). In contrast, the RCPM test failed to show significant differences in performance across all three comparisons: PRE and POST-program phases ($p > .10$), POST and FOLLOW-UP program phases ($p > .20$), and PRE and FOLLOW-UP program phases ($p > .04$).

A comparison, on the Adaptive Functioning Index - Social Education Test (AFI), of those individuals who participated in the program exclusively during its RESEARCH phase versus those who participated exclusively thereafter revealed that the RESEARCH group had significantly greater skills than the POST-RESEARCH group prior to program entry and following program exit, and that these differences persisted into the FOLLOW-UP period ($p < .01$). Further, the POST-RESEARCH group actually demonstrated a significant decrease in performance between PRE- and FOLLOW-UP program phases as indicated by the significant AFI performance by Group interaction (see Tables 2 and 5).

TABLE 2

Means and Standard Deviations for Pre, Post and Follow-Up Program Performance for the Research and Post-Research Groups

Group		Research		Post-Research	
	Time	Mean	Standard Deviation	Mean	Standard Deviation
Test					
PPVT (MA)		n = 16		n = 7	
	Pre	7.90	2.60	5.30	2.14
	Post	9.36	3.07	6.08	2.57
	F/U	8.04	1.85	5.55	1.81
RCPM		n = 13		n = 3	
	Pre	16.54	5.99	13.00	2.00
	Post	19.85	4.87	15.67	7.64
	F/U	19.23	5.23	18.67	4.16
AFI		n = 17		n = 11	
	Pre	7.58	4.82	3.36	1.91
	Post	9.50	4.80	3.27	2.10
	F/U	9.74	4.98	2.64	1.85

TABLE 3

Comparisons of Pre-Program and Post-Program Performance Analysis of Variance Summary Table

Test	Source	Sums of Squares	DF	F
PPVT (MA)				
	Group (G)	82.30	1	6.21
	Error	265.10	20	
	PPVT (P)	12.06	1	8.40*
	PG	1.09	1	0.76
	Error	28.72	20	
RCPM				
	Group (G)	72.60	1	1.60
	Error	635.87	14	
	RCPM (R)	43.50	1	2.96
	RG	0.50	1	0.03
	Error	205.72	14	
AFI				
	Group (G)	364.79	1	12.70*
	Error	746.83	26	
	AFI (A)	11.07	1	3.89
	AG	13.39	1	4.70
	Error	74.01	26	

* $p < .01$

TABLE 4

Comparisons of Post-Program and Follow-Up Program Performance Analysis of Variance Summary Table

Test	Source	Sums of Squares	DF	F
PPVT (MA)				
	Group (G)	79.45	1	7.98
	Error	199.17	20	
	PPVT (P)	84632.00	1	4.09
	PG	1.48	1	0.73
	Error	39.80	20	
RCPM				
	Group (G)	27.42	1	0.55
	Error	693.79	14	
	RCPM (R)	6.93	1	1.36
	RG	15.93	1	3.12
	Error	71.54	14	
AFI				
	Group (G)	593.02	1	20.03*
	Error	769.73	26	
	AFI (A)	0.54	1	0.19
	AG	2.54	1	0.90
	Error	73.05	26	

* $p < .01$

TABLE 5

Comparisons of Pre-Program and Follow-Up Program Performance Analysis of Variance Summary Table

Test	Source	Sums of Squares	DF	F
PPVT (MA)				
	Group (G)	61.91	1	7.23
	Error	171.15	20	
	PPVT (P)	0.38	1	0.41*
	PG	0.03	1	0.03
	Error	18.54	20	
RCPM				
	Group (G)	20.51	1	0.51
	Error	568.49	14	
	RCPM (R)	85.16	1	5.10
	RG	10.78	1	0.65
	Error	233.72	14	
AFI				
	Group (G)	428.17	1	14.48*
	Error	768.73	26	
	AFI (A)	6.73	1	2.48
	AG	27.59	1	10.17*
	Error	70.53	26	

* $p < .01$

Discussion

The data indicate that group oriented specialized intervention for moderately to severely mentally handicapped adults can facilitate the acquisition of a variety of functional skills required for participation in less restrictive environments such as vocational training opportunities. Furthermore, the gains which are thereby achieved appear to have a relatively high degree of stability insofar as they are maintained well after program involvement has terminated. However, in some cases there is an indication of slight decline in certain skills when subsequent program involvements may not directly require the utilization of those acquired skills on a daily or even semi-regular basis. Nonetheless, this finding extends, for long-term program initiatives, the optimistic conclusions for positive client change evident from the extensive literature on gains from short-term interventions. It appears that the opportunity for reinforcement and continued utilization of acquired skills is necessary in order for those skills to remain at that level. Without opportunities for skill utilization, previously acquired competencies show progressive loss albeit at a rate slower than the rate of acquisition during the formal phases of specialized instruction.

The second conclusion to be drawn from the data supports the utility and applicability of intervention strategies and techniques developed and utilized in experimental settings within applied practice settings. Specifically, the fact that individuals involved in the POST-RESEARCH phase of the ten year program showed positive change proportionately equal to those individuals who participated exclusively in the RESEARCH phase where intensive monitoring and program development occurred, indicates that the extent of application of sound training methodology certainly can be carried successfully into ongoing daily practice. It is hypothesized however, that should such methodology not be consistently applied, skill acquisition gains may be markedly less or even non-existent as suggested by the decrement in performance on the AFI observed for the POST-RESEARCH group between the PRE- and POST-test phases.

A final remark about the data is that a trend similar to that reported by Groeneweg et al. (in press) appears within this small sample. Specifically, there appears to be a trend over years toward increasingly more severe levels of handicap requiring service within community-based programs. This trend within the more severely handicapped group itself, combined with the positive results from the type of intervention reported by Hughson, Berrien and Brown (1977) suggests that more intensive and well-structured programs will need development in order to meet the demands placed on community facilities for services. The current data, particularly that obtained from the research group, lend a certain note of optimism to the view that significant gains can be achieved for these individuals over a few years of intervention, and that these gains may be retained over time if opportunities for rehearsal and maintenance are provided.

The data also support the view that techniques developed through research can be effectively translated into ongoing practice. Advances in skill acquisition and program implementation can be achieved in applied settings and effectively translated from research to ongoing practice settings.

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FOOTNOTES

[1] The data for the PRE- and POST- periods for the RESEARCH phase were obtained largely from tests completed by research and program staff in the Pre-Vocational Unit operating under the direction of Ms. Anne Hughson as reported in Hughson, Berrien & Brown (1977).

[2] The data for the FOLLOW-UP period for both the RESEARCH and POST-RESEARCH phases, and for the PRE- and POST-periods for the POST-RESEARCH phase were obtained from test records completed by a variety of program, assessment and research personnel employed by the Institute over the years of program operation.

EMPLOYABILITY ASSESSMENT OF DISABLED OR DISADVANTAGED PERSONS: PREDICTIVE VALIDITY AND EXPECTANCY TABLES FOR TWO NEW DECISION-MAKING AIDS

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This report describes the origin, purpose, method, principle findings, and implications for practice of a recently completed two-year project on employability assessment. Given the many psychological, social, and economic benefits of employment for disabled or disadvantaged persons, we hope our work proves useful to practitioners and researchers elsewhere.

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Origin, Purpose, And Focus of The Research

Origin: Discrepant Definitions of "Job Readiness"

In early 1983, Line 1000 Placement Services (an Ottawa agency funded by Employment and Immigration Canada to provide centralized job placement services for "job ready" disabled or socially disadvantaged clients' needs) attempted to resolve a problem that had existed for some time. Counsellors in the approximately 20 community agencies that referred clients to Line 1000 and placement officers at Line 1000 seemed to be using quite different clinical definitions of the elusive concept of "job readiness". All referred clients were supposed to be "job ready"; in fact, however, a substantial minority were being evaluated as "not job ready" by Line 1000 staff.

As an initial step towards resolution of this problem, Line 1000 held a workshop for counsellors from its network o referring agencies on May 20, 1983, at the Royal Ottawa Regional Rehabilitation Centre (RORRC). The fact that over 60 persons attended, instead of the 20-25 who had been expected, indicated that the question of how to define job readiness more clearly and operationally was a widely shared concern.

Purpose: Derivation of a Simple, Valid Method of Assessing Employability

As a follow-up to the workshop, the authors prepared a research proposal that was later accepted and funded by the Disabled Persons Employment Directorate of Employment and Immigration Canada. The purpose of the research was to establish a simple, validated method for assessing employability among Line 1000's clientele of physically impaired, psychiatrically impaired, or socially disadvantaged persons. Many participants at the May 20 workshop had identified the use of such a tool as indispensable for overcoming the problem of discrepant definitions of job readiness.

Focus: "Employability" Rather Than "Job Readiness"

In our review of the literature, carried out during preparation of the research proposal, we found that the construct of "job readiness" had received very little attention on either the conceptual (e.g., Bitter, 1968; Pumo, Sehl, and Cogan, 1966; Way & Lipton, 1973) or measurement level (e.g., Bitter & Bolanovich, 1974; Benson & Whittington, 1973). We concluded that a project focused narrowly on "job readiness" would probably demand a major scale-construction effort. This greatly exceeded our immediate interests and resources.

On the other hand, the literature review had indicated that somewhat more conceptual and measurement work had been carried out on the concept of "employability". For purposes of solving the practical problem facing Line 1000, "employability" appeared to us to be virtually synonymous with but more tractable than "job readiness". We therefore took "employability" as the focus of the research and adopted Bolton's (1982) definition of the term: "Employment" potential (or employability) refers to the skills, special need or condition, etc., never differed by more than 2 percentage points. Hence, the magnitude of any biases possibly introduced by 73 clients' refusal to take part in the study or by Line 1000's screening out of 24 others seems likely to be small.

Both the research sample and the total group of referred clients were predominantly male, relatively young, and roughly equally likely to be physically impaired, psychiatrically impaired, or socially disadvantaged. Formal levels of education tended to be low, with about 75% having a high school diploma or less. Finally, English was the mother tongue of over 70%. It should be noted that to take part in the study all members of the research sample had to be capable of understanding the research instruments, which were in English only (pending the validation results).

Choice of Instruments to Assess Employability

From the pool of potential instruments identified during the literature review, including the 10 described by Bolton (1982), and discussion with several individuals familiar with the employability research domain, we chose two sets of measures. The first set we used without modification; the second we used only after making what we saw as needed changes.

Functional Assessment Inventory (FAI) and Personal Capacities Questionnaire (PCQ). The FAI and PCQ are instruments for describing clients' work capacities and barriers to employment in observable, functional (rather than medical diagnostic) terms (Bolton, 1982; Crewe, Athelstan, & Meadows, 1980; Crewe and Turner, 1984). They were designed as companion instruments. The FAI permits a counsellor or other service provider to describe a client on 30 different dimensions, while the PCQ allows the client to provide his or her own self-description on the same dimensions. The parallel nature of the two tools, along with their explicit vocational relevance, made them an attractive choice in the present context.

Each instrument consists of 30 vocationally relevant 4-point behavioural rating scales (items), covering the following areas: vision, hearing, mobility, upper extremity functioning, hand functioning, coordination, motor speed, capacity for exertion, endurance, loss of time from work due to treatment or medical problems, stability of condition, learning ability, perceptual organization, memory, language functioning, literacy, speech, judgement, persistence, congruence of behaviour with rehabilitation goals, accurate perception of capabilities and limitations, effective interaction with people, social support system, personal attractiveness, job-relevant skills, work habits, work history, acceptability to employers, access to job opportunities, and economic disincentives.

For each of the 30 items, the client is described as having either "no significant impairment" (scored as 0) or else as having a mild (1), moderate (2), or severe (3) limitation. The alternatives for each scale are anchored with behavioral referents that were chosen because of their direct relationship with work. Total limitation scores on the FAI and PCQ, formed by summing across the 30 items, can vary from 0 (no functional limitations) to 90 (extreme functional limitations).

Seven factors have emerged from research on the FAI (Crewe and Turner, 1984): adaptive behaviour, motor functioning, cognition, physical condition, communication, vocational qualifications, and vision. Similar work has not yet been carried on the PCQ. Both instruments also include a checklist of special client strengths and provisions for identifying functional limitations that may be changed through appropriate services.

Considerable field testing of the FAI has been carried out and data on reliability and validity (summarized in Crewe and Turner, 1984) are promising. Interrater and internal consistency reliability seem satisfactory, concurrent validity (relationship with type and severity of disability) is in line with expectations, and there is preliminary evidence supportive of the predictive validity of the FAI. On the other hand, field testing of the PCQ has apparently been minimal to date and thus information on reliability and validity are lacking.

Modified Minnesota Satisfactoriness Scales (MSS). The MSS (Gibson, Weiss, Dawis, & Lofquist, 1970) is a brief, 28-item instrument that measures five aspects of employee job performance ("satisfactoriness") which we thought were highly relevant to employability: job performance, conformance to company rules, personal dependability, personal adjustment, and general (overall) satisfactoriness. However, in its original form, the MSS (hereafter referred to as the "MSS-Employer") is a performance appraisal form that an employer or supervisor uses to rate the actual work of a subordinate, whereas we needed instruments that counsellors, clients, and placement officers could use to predict future client job performance. Hence, we created parallel MSS-Counsellor and MSS-Client forms, through appropriate changes in language. Thus, for example, the original MSS-Employer item no. 1, "Compared to others in his work group, how well does he follow company policies and practices?", became, on our new MSS-Counsellor form, "Compared to other competitively employed workers, how well do you think he/she would follow company policies and practices?" Similarly, on our new MSS-Client instrument, item no. 1 became "Compared to other workers doing the same kind of work, how well do you think you would follow company policies and practices".

We anticipated that the internal consistency reliabilities of our modified versions of the MSS would be about as high as those reported for the original scale (i.e., .92 to .95 for the complete scale; Gibson et al., 1970). Whether the modified MSS instruments would also be predictively valid was, of course, a key question to be answered by the study itself.

Outcome (Criterion) Measures

The two major outcome variables against which the FAI, PCQ, MSS-Counsellor, and MSS-Client instruments were to be validated were the client's employment status (i.e., working competitively vs. not working competitively) at case closure and at follow-up. Our rationale for choosing employment as our primary criterion of validity was simply that unless instruments could predict this outcome, they could hardly claim to be valid measures of "employability". We also used, however, several secondary criterion measures: employer ratings of actual on-the-job performance, occupational status, and hourly wages.

Outcomes at case closure. Information was available on the closure status (i.e., the client's final status when Line 1000 closed his or her case file) of virtually all members of the research sample (277 of 278). A total of 194 clients were classified as either "successes" (n = 148; 76%) or "failures" (n = 46; 24%) at closure,

TABLE 1

Comparison of Research Sample With All Clients Referred to Line 1000 During Study Period on Selected Background Characteristics

	Research Sample		All Referrals During Period	
Background characteristic	n	%	n	%
Sex:				
Male	180	65	242	65
Female	98	35	133	35
	278	100	375	100
Age:				
17-24	66	24	87	24
25-29	56	21	73	20
30-39	76	28	98	27
40-49	47	17	63	18
50-59	25	9	35	10
60-65	2	1	4	1
	272	100	360	100
Marital status:				
Single	154	57	204	57
Married	64	23	90	25
Separated	19	7	25	7
Divorced	29	11	37	10
Widowed	4	2	4	1
	270	100	360	100
Special Need/condition:				
Physical impairment	76	28	109	30
Psychiatric impairment	99	36	122	34
Social disadvantagement	78	29	99	28
Intellectual impairment	9	3	12	3
Other/unclassifiable	10	4	16	5
	272	100	358	100

TABLE 1 (cont'd)

Background characteristic	Research Sample		All Referrals During Period	
	n	%	*n*	%
Education:				
Graduate degree	6	2	12	3
Bachelor's degree	15	6	19	5
Community college diploma	24	9	31	9
Some university, community college, or professional training	24	9	27	8
High school diploma	102	38	134	38
Some high school	71	26	100	28
Grade school diploma or less	26	10	30	9
	268	100	353	100
Primary language:				
English	198	73	260	72
French	57	21	77	21
Other	17	6	25	7
	272	100	362	100

Note: The study sample consisted of those 278 persons who, out of the total of 375 referred to Line 1000 during the study period, were eligible *and* consented to take part in the study. *N*'s less than 278 and 375 are due to missing data on the background characteristic in question.

with the remainder (n = 83) being coded as "neither successes nor failures". According to Line 1000 staff, case closure takes place, on the average, approximately 4-5 months after referral, with a wide range of closure dates. We were able to obtain data on this variable (time post-referral) on only 10% (n = 27) of our sample. For this group, the means was 139 days (equal to 19.9 weeks or 4.6 months), with a range of 19 to 381 days.

"Successful" closure meant that the client was working competitively, in one of the following statuses: working--placed by Line 1000 in employment that had either no government incentive component (n = 33) or else had such a component (e.g., Career Access or Job Core; n = 38); working--placed by an agency other than Line 1000 (n = 30); working--self-placed (n = 45); and working--other (n = 2). "Failure" statuses were assigned to clients whom Line 1000 had closed as being "not job ready" (i.e., neither working nor apparently ready to begin work) due to their refusal to cooperate (n = 7), personal immaturity (n = 8), bad attitude (n = 6), or a variety of other reasons (n = 25). Finally, clients coded as "neither successes nor failures" included those who at case closure were ill (n = 27), were in school or vocational training (n = 18), had lost contact with Line 1000 (n = 32), or were in some "other" category (n = 6).

The degree of potential bias introduced by basing the predictive validity analyses on the 194 members of the research sample who were classified as either successes or failures appears to have been minor. Table 2 shows that on all of the background variables listed earlier in Table 1, the percentage distribution for the criterion subsample at closure was very similar to those for both the research sample and the larger group of all Line 1000 referrals. Hence, any validity data on the FAI, PCQ, or modified MSS instruments that have been based on the closure group should be generalizable to the study sample and to all referrals made during the 13-month study period (a group whom we must assume--in the absence of major shifts in Line 1000 referral policies--to be reasonably representative of current referral cohorts).

Outcomes at follow-up. Independently of Line 1000, a research assistant completed follow-up telephone interviews with 200 (72%) of the 278 members of the research sample. Based on data on the timing of these interviews for 182 of the 200 clients successfully contacted, the telephone follow-up took place at an average of 267 days after referral, equal to 38.1 weeks and 8.8 months post-referral (range = 182 to 441 days). On the average, then, the follow-up interviews occurred

TABLE 2

Subsamples on Which Predictive Validity Analyses Were Based at Case Closure and Follow-up, By Outcomes And Selected Background Characteristics

Outcome or background characteristic	Case closure subsample		Follow-up subsample	
	n	%	n	%
Outcome:				
Success (working competitively)	148	76	115	60
Failure (not working)	46	24	76	40
	194	100	191	100
Sex:				
Male	125	64	123	64
Female	69	36	68	36
	194	100	191	100
Age:				
17-24	53	28	44	24
25-29	38	19	35	19
30-39	51	27	53	28
40-49	29	15	34	18
50-59	20	10	19	10
60-65	1	1	1	1
	192	100	186	100
Marital status:				
Single	112	59	104	56
Married	47	25	46	25
Separated	11	6	12	7
Divorced	18	9	19	10
Widowed	3	1	4	2
	191	100	185	100
Special need/condition:				
Physical impairment	57	30	53	29
Psychiatric impairment	62	32	66	36
Social disadvantagement	58	30	49	26
Intellectual impairment	6	3	8	4
Other/unclassifiable	9	5	10	5
	192	100	186	100

TABLE 2 (cont'd)

Outcome or background characteristic	Case closure subsample		Follow-up subsample	
	n	%	n	%
Education:				
Graduate degree	6	3	2	1
Bachelor's degree	9	5	9	5
Community college diploma	16	8	19	10
Some university, community college, or professional training	20	11	15	8
High school diploma	69	36	78	42
Some high school	51	27	44	24
Grade school diploma or less	18	10	18	10
	189	100	185	100
Primary language:				
English	138	72	125	67
French	41	21	48	26
Other	13	7	13	7
	192	100	186	100

Note: N's less than 194 or 191 are due to missing data on the background characteristic in question.

roughly 4 months after case closure. They were completed by the end of October, 1985.

As Table 2 shows, 191 of the 200 clients with whom follow-up interviews were completed were classified as either "successes" (_n_ = 115; 60%) or "failures" (_n_ = 76; 40%). A client was considered a "success" if, at follow-up, he or she reported working for pay for 35 or more hours per week (_n_ = 91), working for pay for between 20 and 34 hours per week, or working for pay between 1 and 19 hours per week (_n_ = 5). "Failures" included clients who reported either that they were unemployed but looking for work (_n_ = 56) or else unemployed and not looking for work (_n_ = 20). Finally, a total of 9 clients were coded as "neither successes nor failures" because they were either full-time students (_n_ = 5), full-time homemakers (_n_ = 1), retired (_n_ = 1), or unclassifiable (_n_ = 2).

The follow-up subsample, like the case closure group, was very similar to the research sample and entire group of Line 1000 referrals in terms of its distribution on key background characteristics (compare Table 2 with Table 1). Here, too, then, potential biases introduced into predictive validity analyses would seem minimal, at least on major socio-demographic variables.

Other outcome measures. In the telephone interview, data were gathered on two secondary outcome measures (not to be discussed further in this report), applicable only to those clients who were employed: occupational status (Blishen & McRoberts, 1976) and hourly wages. Line 1000 staff were able to data on another secondary outcome, employer (supervisor) ratings of actual on-the-job work performance on the original version of the Minnesota Satisfactoriness Scales (Gibson et al., 1970). Based on information available on the timing of these MSS-Employer ratings for 88 clients, they were made, on the average, 221 days (31.6 weeks, or 7.3 months) after the initial referral to Line 1000, with a range of 4 to 628 days.

Procedure

In November, 1983, a meeting was held with counsellors from the Line 1000 network of referring agencies to launch the research project. The broad objectives of the study were outlined and a general orientation to the various instruments and procedures was given. However, this orientation did not constitute specific training in the instruments, which are quite simple and which counsellors were expected to master on their own. It is possible that the tools would prove even more valid than they did in this study if users were to be given regular, intensive training in their use.

At the November meeting, and in subsequent contacts with the referring agencies, we asked that the following referral procedures be followed. First, when a counsellor had a client whom he or she considered "job ready", he or she was to make a decision, in the usual way, about referring the client to Line 1000.

Second, if a decision to refer were made, the counsellor was to complete the usual Line 1000 referral form and to ask the client to participate in the project and sign a statement of informed consent. (The client's agreement or refusal to take part in the research was to have no effect on the counsellor's decision about referral to Line 1000.)

Third, if the client agree to participate, the counsellor was to ask him or her to complete the PCQ and the MSS-Client instruments. Independently, the counsellor was to fill out the FAI and the MSS-Counsellor forms.

Fourth, together with the Line 1000 referral form (which gathered information on the client's demographic characteristics, work history and preferences, special needs, etc.), the completed research instruments were to be forwarded to the project coordinator (a part-time research assistant) at Line 1000. Upon receipt of the packet, the coordinator gave the Line 1000 referral form to Line 1000 and placed the research instruments into a special, separate file to which Line 1000 staff did not have access.

Fifth, the client's placement officer was asked to make any clinical decisions (e.g., about accepting the client for services, about needed placement assistance, etc.) in the usual way. Independently, the placement officer was to fill out the FAI and MSS-Counsellor forms.

The reason for requesting the referring counsellors and placement officers to conduct their affairs and make their clinical decisions in a "business as usual" fashion, without reference to their own ratings of the client or knowledge of other parties' ratings, was to avoid restricting the range of the employability of our client pool. Any such range restriction would curtail the variance of the scores on our predictive instruments and lower any correlations (i.e., validity coefficients) with the outcome variables (Thorndike, 1982).

As far as we can tell, our instructions were followed closely at Line 1000 and its partner agencies. However, our information on actual procedures in the referring agencies is of an informal nature only. We had neither the authority nor the resources to check on compliance with our instruction that referring counsellors fill out the FAI and MSS-Counsellor in complete independence of the client's PCQ and MSS-Client. On the other hand, at Line 1000, the research assistant was able to implement the safeguard of physically separating the client's research file from his or her clinical file.

It must also be reported that, according to the clinical impressions of the second author (who was Director of Line 1000 during the research period) and some other Line 1000 staff, the "quality" (i.e., apparent job readiness) of clients referred appeared to go up once the project started and to go back down after it was over. There is no way of verifying these subjective impressions. However, to the extent that they are accurate and the presence of the project (especially the use of the research instruments) had a sensitizing effect on decision-making, restriction of range of the client pool took place and produced some lowering of the correlations between the research instruments and outcome variables.

Major Findings

Before the specific findings of most immediate interest are presented, i.e., those related to predictive validity and the expectancy tables based on it, several other, more general, results will be mentioned.

Relation of Background Characteristics and Major Outcomes

At case closure, only sex was related to employment status. As Table 3 shows, women were more likely than men to be working competitively at closure (90% vs. 69%). However, this advantage had disappeared by follow-up. The fact that sex at case closure (phi = .24, $\underline{p} < .002$) and age at follow-up ($\underline{r} = -.22$, $\underline{p} < .001$) were the only background characteristics found to be significantly correlated with employment status at closure or follow-up led us to ignore background variables in examining the correlations of the FAI, PCQ, MSS-Counsellor, and MSS-Client with the main criterion variables.

Interestingly (and encouragingly), disability/condition was not related to employment status at either closure or follow-up (Table 4). This finding suggested that, at least for Line 1000's clientele, the pessimism that is sometimes encountered vis-a-vis the employment

TABLE 3

Outcomes (Working Vs. Not Working Competitively) at Case Closure and Follow-Up, by Sex

	Males		Females	
Outcome status	*n*	%	*n*	%
At case closure:				
Working	86	69	62	90
Not working	39	31	7	10
	125	100	69	100
At follow-up:				
Working	73	59	42	62
Not working	50	41	26	38
	123	100	68	100

prospects of the psychiatrically impaired is not justified.

Predicted Vs. Actual Job Performance

The use of the various versions of the Minnesota Satisfactoriness Scales provided an unusual opportunity to compare how well client, counsellor, and placement officer predictions about client job performance compared with actual, on-the-job ratings made by employers. Table 5 shows that, for a subset of 87 clients on whom complete ratings from all four sources were available, employers' ratings (of general job satisfactoriness) were significantly lower than the predictive ratings made by either the client or referring counsellor (for the overall test of differences among means, Hotellins's T-squared = 129.98, F [3, 84] = 42.32, $p < .001$). Client's self-ratings, on the other hand, were significantly more positive than those from the other three sources. Placement officers did not differ significantly from either referring counsellors or employers. These results suggest that employers are a demanding audience, something that should be kept in mind in referral and placement decisions.

TABLE 4

Outcomes (Working Vs. Not Working Competitively) at Case Closure and Follow-Up, by Special Need/Condition

	Physical impairment		Psychiatric impairment		Social disadvantagement	
Outcome status	n	%	n	%	n	%
At case closure:						
Working	44	77	49	79	41	71
Not working	13	23	13	21	17	29
	57	100	62	100	58	100
At follow-up:						
Working	30	57	36	55	31	63
Not working	23	43	30	45	18	37
	53	100	66	100	49	100

TABLE 5

Correlations and Differences Among Ordered Means on Measures of Predicted and Actual Job Performance (Total Score)

Measure of job performance	Mean	SD	Measure 1	2	3	4
1. MSS-Client	71.9	9.1	---	0.52	0.13	0.15
2. MSS-Referring counsellor	63.8	8.8	8.1*	---	.26	0.15
3. MSS-Placement officer	61.4	9.4	10.5*	2.4	---	0.08
4. MSS-Employer	57.9	11.6	14.0*	5.9*	3.5	---

Note: n = 87; MSS = Minnesota Satisfactoriness Scales. Pearson correlation coefficients are above the diagonal, differences among ordered means are below the diagonal. Client's, referring counsellor's, and placement officer's ratings are predictions about client's future performance; employer's rating is of client's actual on-the-job performance.

* $p < .001$.

Predictive Validation Results

Internal consistency reliability. Alpha coefficients for the various instruments were as follows: FAI-Counsellor, functional limitations portion (30 items) = .82; special strengths portion (10 items) = .64; PCQ-Client, limitations = .79; strengths = .68; FAI-Placement officer, limitations = .79; strengths = .79; MSS-Referring counsellor (28 items) = .92; MSS-Client = .93; MSS-Placement officer = .92; and MSS-Employer = .93.

Functional limitation ratings. As is indicated by Table 6, the placement officers (FAI) perceived clients as having greater limitations than did the referring counsellors (FAI) or clients (PCQ). (On the overall test of differences among means, Hotelling's *T*-squared = 15.49, *F* [2, 199] = 7.71, *p* .001.) There was also only a moderate to low relationship among the perceptions

TABLE 6

Correlations and Differences Among Ordered Means on Functional Limitation Measures (Total Limitations Score)

Measure of functional limitations	Mean	SD	Measure 1	Measure 2	Measure 3
1. FAI-Placement officer	8.0	6.0	---	.29	.45
2. PCQ-Client	6.5	5.5	1.5*	---	.59
3. FAI-Referring counsellor	6.4	5.4	1.6**	0.1	---

Note: *n* = 201. FAI = Functional Assessment Inventory. PCQ = Personal Capacities Questionnaire. Pearson correlation coefficients are above the diagonal, differences among ordered means are below the diagonal.

* $p < .01$
** $p < .001$

of the three rating sources, with the correlation being highest between the client and referring counsellor and lowest between the client and placement officer. Interestingly, this same pattern of correlations among the three rating sources was also present in the MSS data (cf. Table 5).

Predictive validity coefficients. The only instruments that were found to have a consistent, clinically useful degree of ability to predict the two major outcomes, employment status at case closure and at follow-up, were the FAI and PCQ, and specifically their functional limitations section. Validity coefficients for the full, 30-item total limitations scale were also larger than for any of the sub-scales derived from it. Hence, presentation of results here will be limited to the FAI and PCQ total limitations scale.

Means, standard deviations, and skewness are given for the FAI and PCQ in Table 7, both for the three individual rating sources as well as for all possible combinations of them. The rating sources were combined through the use of robust, unit weights rather than shrinkage-prone weights derived from multiple regression in order to make them as generalizable as possible to new Line 1000 client cohorts.

Table 8 reports the correlations between the individual and combined predictors and the main outcome variables, success and failure at case closure and follow-up. Though modest in size, all 14 of the predictive validities were statistically significant (i.e., non-zero). (The validity coefficients reported in Table 8 are negative, as expected, because the higher the limitations score, the less likely was a successful employment outcome, which was coded 1 vs. 0 for an unsuccessful outcome.)

As anticipated, larger validity coefficients were obtained with the composite than with the individual FAI and/or PCQ scores. In actual practice, the choice of which individual or combined rating sources to use for help in clinical decision-making would depend both on the magnitude of the validity coefficient given in Table 8 as well as on pragmatic considerations such as the relative costs and benefits of obtaining data from each rating source.

Expectancy tables (appendix). In Appendix Tables A to G, the 14 predictive validity coefficient displayed in Table 8 are translated into simple, clinically useable terms. As an example of their use, suppose a client had obtained a score of 2 on referring counsellor's FAI. According to the norms in Table A, the likelihood of a successful outcome at closure would be 82%, somewhat

TABLE 7

Means and Standard Deviations for the Research Sample on Single and Combined FAI and/or PCQ Instruments (Total Limitations Score)

FAI and/or PCQ total limitations score & source	n	Mean	SD	Skewness
FAI-RC (Referring counsellor)	264	6.53	5.91	1.51
PCQ-CL (Client)	269	6.64	5.89	1.66
FAI-PO (Placement officer)	213	7.94	6.04	1.06
FAI-RC + PCQ-CL	259	13.26	10.56	1.55
FAI-RC + FAI-PO	202	14.35	9.62	0.92
PCQ-CL + FAI-PO	209	14.30	9.12	1.06
FAI-RC + PCQ-CL + FAI-PO	201	20.88	13.29	1.09

Note: FAI = Functional Assessment Inventory. PCQ = Personal Capacities Questionnaire. Higher scores signify more severe limitations. Total limitation scores from different rating sources (e.g., referring counsellor + client) were combined through simple addition, with each FAI and/or PCQ score receiving the same (i.e., unit) weight in order to minimize shrinkage when used with new samples.

TABLE 8

Validity of Single and Combined FAI and/or PCQ Instruments as Predictors of Outcome (Working) at Closure and Follow-up

FAI and/or PCQ total limitations score & source	Pearson correlation with outcome, "working competitively"			
	At case closure		At follow-up	
	n	*r*	*n*	*r*
FAI-RC (Referring counsellor)	185	-.21**	181	-.14*
PCQ-CL (Client)	189	-.19**	185	-.13*
FAI-PO (Placement officer)	161	-.23***	159	-.24***
FAI-RC + PCQ-CL	183	-.22***	178	-.15*
FAI-RC + FAI-PO	152	-.27***	152	-.18*
PCQ-CL + FAI-PO	158	-.31***	156	-.22**
FAI-RC + PCQ-CL + FAI-PO	152	-.30***	151	-.19**

Note: FAI = Functional Assessment Inventory. PCQ = Personal Capacities Questionnaire. Higher scores signify more severe limitations. "Working competitively" was coded 1 at case closure and follow-up ("not working" = 0). Persons with outcomes that were neither successful nor unsuccessful were excluded at both periods.

* $p < .05$ (1-tailed)
** $p < .01$ (1-tailed)
*** $p < .001$ (1-tailed)

above the average observed for all clients (76%). On the other hand, a score of 14 or more would indicate that the client's probability of working at closure is 60%, some 16% lower than the overall average. The other Appendix Tables contain the same sort of information for the other individual and combined FAI and/or PCQ measures.

Guidelines For Use in Practice

We conclude with several brief but important considerations that should be kept in mind in any practical applications of our results.

1) The predictive coefficients and expectancy tables presented here are valid only for the type of clients and labour market context on which they were derived. Hence, agencies in other communities should strongly consider conducting their own local validation studies before using the FAI or PCQ as routine employability assessment tools.

2) Even at Line 1000, it would be highly desirable to gather additional data in the future (although, if the tools are adopted, restriction of range resulting from their impact on decisions will have to be taken into account in any validation work). We believe our results should prove quite robust for purposes of use by Line 1000 and its referring agencies. However, it would certainly be desirable to conduct cross-validation research on fresh client cohorts.

3) Finally, the FAI and PCQ should be used as decision aids, not as decision makers. The validities reported here are at best moderate and even clients with relatively high scores have a substantial chance of employment success. Hence, far from being seen as tools for indicating which clients should be summarily "screened out" of the referral or placement process, the FAI and PCQ should be looked upon as useful devices for assisting counsellors and placement officers to identify those clients who apparently need less, about as much, or more employment preparation or counselling than the "average" client.

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APPENDIX TABLE A

Expectancy Table Showing Relationship Between Referring Counsellor's FAI Total Limitations Score and Probability of Client's Working Competitively at Case Closure and Follow-up

Referring counsellor's FAI total limitations score	n	Clients working competitively	
		n	%
At case closure:			
0 - 3	72	59	82
4 - 8	60	46	77
9 - 13	28	21	75
14 and above	25	15	60
Overall:	185	141	76
At follow-up:			
0 - 3	63	43	68
4 - 8	71	41	58
9 - 13	28	15	54
14 and above	19	9	47
Overall:	181	108	60

FAI = Functional Assessment Inventory.

APPENDIX TABLE B

Expectancy Table Showing Relationship Between Client's PCQ Total Limitations Score and Probability of Client's Working Competitively at Case Closure and Follow-up

Client's PCQ total limitations score	n	Clients working competitively	
		n	%
At case closure:			
0 - 4	90	71	79
5 - 10	64	50	78
11 - 15	19	13	68
16 and above	16	9	56
Overall:	189	143	76
At follow-up:			
0 - 3	72	50	69
4 - 7	49	29	59
8 - 10	32	19	59
11 and above	32	16	50
Overall:	185	114	62

PCQ = Personal Capacities Questionnaire

APPENDIX TABLE C

Expectancy Table Showing Relationship Between Placement Officer's FAI Total Limitations Score and Probability of Client's Working Competitively at Case Closure and Follow-up

Placement officer's FAI total limitations score	n	Clients working competitively n	Clients working competitively %
At case closure:			
0 - 2	33	30	91
3 - 5	39	33	85
6 - 11	47	34	72
12 and above	42	28	67
Overall:	161	125	78
At follow-up:			
0 - 2	31	23	74
3 - 5	41	25	61
6 - 11	48	27	56
12 and above	39	19	49
Overall:	159	94	59

FAI = Functional Assessment Inventory

APPENDIX TABLE D

Expectancy Table Showing Relationship Between Summed Total Limitations Scores of Referring Counsellor (FAI) and Client (PCQ) and Probability of Client's Working Competitively at Case Closure and Follow-up

Summed total limitations scores of referring counsellor's FAI + client's PCQ	n	Clients working competitively	
		n	%
At case closure:			
0 - 5	49	41	84
6 - 10	47	38	81
11 - 20	53	38	72
21 and above	34	22	65
Overall:	183	139	76
At follow-up:			
0 - 5	43	34	79
6 - 10	47	28	60
11 - 20	58	31	53
21 and above	30	15	50
Overall:	178	108	61

FAI = Functional Assessment Inventory
PCQ = Personal Capacities Questionnaire

APPENDIX TABLE E

Expectancy Table Showing Relationship Between Summed Total Limitations Scores of Referring Counsellor (FAI) and Placement Officer (FAI) and Probability of Client's Working Competitively at Case Closure and Follow-up

Summed total limitations scores of referring counsellor's FAI + placement officer's FAI		Clients working competitively	
	n	n	%
At case closure:			
0 - 5	31	27	87
6 - 10	34	29	85
11 - 20	57	46	81
21 and above	30	16	53
Overall:	152	118	78
At follow-up:			
0 - 5	29	24	83
6 - 20	93	52	56
21 and above	30	14	47
Overall:	152	90	59

FAI = Functional Assessment Inventory

APPENDIX TABLE F

Expectancy Table Showing Relationship Between Summed Total Limitations Scores of Client (PCQ) and Placement Officer (FAI) and Probability of Client's Working Competitively at Case Closure and Follow-up

Summed total limitations scores of client's PCQ + placement officer's FAI	n	Clients working competitively n	Clients working competitively %
At case closure:			
0 - 5	27	25	93
6 - 20	98	80	82
21 and above	33	17	52
Overall:	158	122	77
At follow-up:			
0 - 5	24	19	79
6 - 20	102	59	58
21 and above	30	16	53
Overall:	156	94	60

FAI = Functional Assessment Inventory
PCQ = Personal Capacities Questionnaire

APPENDIX TABLE G

Expectancy Table Showing Relationship Between Summed Total Limitations Scores of Referring Counsellor (FAI), Client (PCQ), and Placement Officer (FAI) and Probability of Client's Working Competitively at Case Closure and Follow-up

Summed total limitations scores of referring counsellor's FAI + client's PCQ + placement officer's FAI		Clients working competitively	
	n	n	%
At case closure:			
0 - 10	37	31	84
11 - 20	58	49	84
21 - 30	29	21	72
31 and above	28	17	61
Overall:	152	118	78
At follow-up:			
0 - 10	33	25	76
11 - 20	59	36	61
21 and above	59	29	49
Overall:	151	90	60

FAI = Functional Assessment Inventory
PCQ = Personal Capacities Questionnaire

DISABLED YOUTH IN TRANSITION: IMPLICATIONS FOR SOCIAL ACTION APPROACHES FOR REHABILITATION COUNSELLORS

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Introduction

During the past 10 to 15 years, persons with disabilities have begun to challenge society's perception of disabled persons as users of service and welfare recipients, advocating instead for full partnership and citizenship. Even the meaning of the term disabled is being seriously challenged by a growing number of disabled adults. The difficulties they encounter are not because of their functional limitations, but rather they result from the discrimination and barriers which prevent them from entering the mainstream of society. Following the civil rights movements of other minorities, coalition of disabled adults are taking social action: asserting their right to self determination and access to social and employment opportunities (Heumann, 1979, Bowe, 1978, and Hourihan, 1979).

The emergent power of self help within the disabled community has crystalized in centres for independent living across North America. The independent living movement asserts the tenets of personal choice, user control over ongoing support services (such as attendant care, transportation, environmental modification), and equal access to the rights and responsibilities afforded to all Canadians. The strength of the movement has been its ability to unleash the power of mutual support and social action within a community development framework. The movement in the United States has evolved to include federal initiative funding, policy acceptance and legitimization of the functions of independent living through clearing houses and university programs. In Canada, the evolution of independent living reflects our Canadian character of planned change and cautious experimentation. As a result, the existing and developing independent living thrusts are surviving on soft developmental funding without clear political mandates. The force of the movement is nonetheless becoming focused and marshalled through public education, local networking and federal initiatives and policy, e.g. Secretary of State and National Health and Welfare - health promotions.

The success of the disability movement has called into question, societal and professional beliefs that disabled persons are unable to learn and achieve. The social action approach, focusing effort outwardly on social barriers, rather than inwardly on specific problems of disabilities, challenges our current counselling approaches that continue to view the distress of disabled persons as inherent to the disability.

Gliedman and Roth, (1980) view most of our intervention strategies with disabled persons as based within a social pathology paradigm. Others have called this a rehabilitation paradigm or a professional model. In this approach, problems are defined as deviations from the acceptable norms of behaviour, and solutions emerge as professionals identify, through accurate assessment and diagnosis, the interventions and policy issues for the group requiring help. Such a paradigm, Gliedman and Roth state, oversimplifies the problem of social change in the face of prejudice and social discrimination. Within a social pathology paradigm, people are seen as creating their own difficulties because of low motivation and lack of appropriate skills, and counselling therefore is the solution prescribed (Darling, 1979). The attribution of responsibility for the disability to the individual, often referred to as victim blaming, only worsens problems and covertly legitimates the unnecessary suffering which many disabled and their families endure.

Even when social factors are acknowledged, their implications for counselling are generally ignored as we assume that once the functional limitations are remediated or adapted to, and the individual has adjusted to the disability, that the presenting problems will melt away.

While it can be argued that rehabilitation counsellors are not trained to deal with social and political issues, the refusal to deal with the problem as a social issue is, in itself, taking a political position. Furthermore, counsellors who conceptualize the problem as inherent to the disability reinforce the person's perception of himself as deviant, thereby encouraging dependence and helplessness.

Social Action Models Related to Employment Counselling

Rehabilitation counsellors - especially career counsellors - cannot overlook the impact of a social action approach when faced with the reality of differential distribution of desirable resources within society, such as wealth, privilege and political power.

Rule (1971) would assert that social problems result from conflicts over control of these resources and would not exist if the situation was not to the economic and political advantage of certain groups within society. Batchilder, (1960) asserts that disabled persons are natural targets for a functional market economy of competitive, private enterprise that asserts that each person should earn in proportion to his ability to produce. It is little wonder that forty-one percent of persons receiving public assistance are permanently disabled or ill (Stager, 1979, p. 516). Indeed many would assert that it is poverty which is the primary disability rather than the disability itself. Current data is being collected through a Canada Employment and Immigration employment survey which details a high rate of unemployment for the disabled who consider themselves part of the work force. This will go a long way to dispelling the myth that disabled persons are inherently unemployable and challenge society's willingness to accept the differential distribution of access to employment as a given.

Social Content of Families With a Disabled Young Adult

To understand the social context of disabled persons and their families, one must understand the complexity of the social forces on the disabled individual from the time of birth through to the time he presents as a young adult entering into the employment field. Since the majority of individuals seeking employment counselling or specialized services are in their twenties, it is fair to assume that they were born into families in the sixties - a time when parents were developing parent sponsored community services as an alternative to institutionalization. These parents began to relax assuming that the services they were creating would remain ongoing and secure. Most families assumed that their child would stay within the family constellation.

However, the permanence of the home as an ongoing placement is now being challenged, not only by professionals, but by disabled adolescents themselves who have come to expect greater independence because of the role models and political action of self-help groups. Families must also live with the unpredictability of the child's future, where it was once common for physically disabled persons to enter nursing homes as they reached adulthood, and mentally disabled persons to move from special schools to sheltered workshops settings. These alternatives are no longer secure. Workshop settings have become overgrown and bureaucratized, and a powerful anti-workshop movement is emerging because of the ineffectiveness of workshops in securing competitive placement.

Physically disabled persons object to the definition of physical disability as an illness and resist placement in nursing homes, asserting that physical limitations should not abrogate a person's control over decisions affecting his or her lifestyle. While the disability movement is pressing for services that will enable young people to establish themselves in the community, in reality these services are by no means secure or commonplace (MacKinnon & Marlett, 1984).

The force of the Canadian integration movement is carrying a generation of youth and their families through uncharted waters. Although there are vast regional disparities in access to integrated and community based services, most regions are moving toward the same goal of improved integration. Access to community schools, recreation and leisure services and the working partnerships of children, families, friends and professionals have brought disabled children into our neighbourhood as 'kids on the block' - children who belong within our society. As these youngsters approach adulthood and leave mandatory educational supports, they are confronted by segregated and unresponsive services that were developed before integration. These young adults are in double jeopardy because of their youth and their disability, and have come through a time of dramatic upheaval in society's approach to disabled individuals.

In the past, the major force for change within Canadian society, as it related to the status of disabled persons, came from the dynamic social action of parents; the current changes being forced upon our systems are coming from persons with disabilities. The major force for change within Canadian society today lies with disabled youth, who have been raised with the expectation of citizenship, and fuelled with the frustrations of entry into adult status.

The integration of a social action perspective into a rehabilitation counselling framework can provide counsellors with a clearer understanding of the social context of disability. Social action focus would allow the counsellor to join with the disabled individual in creating an alliance in seeing the problem as caused by factors external to the disabled person. This in turn helps disabled young adults to better resist the paralyzing effects of stigmatization and to take appropriate social action on his own behalf.

This paper will now present two approaches which have been used in order to establish a social action approach within a rehabilitation counselling context. The first is a description of transition services, a career placement agency for disabled young adults. The model presented embodies a self directed process wherein the individual is assisted in identifying the barriers which he may encounter, and staff are available as resources to assist in identifying ways to overcome these barriers. The second is a specific counselling technique which embodies the principles inherent in a social action approach.

A Social Action Approach to Rehabilitation Counselling

The technique presented is a structure that helps individuals to:

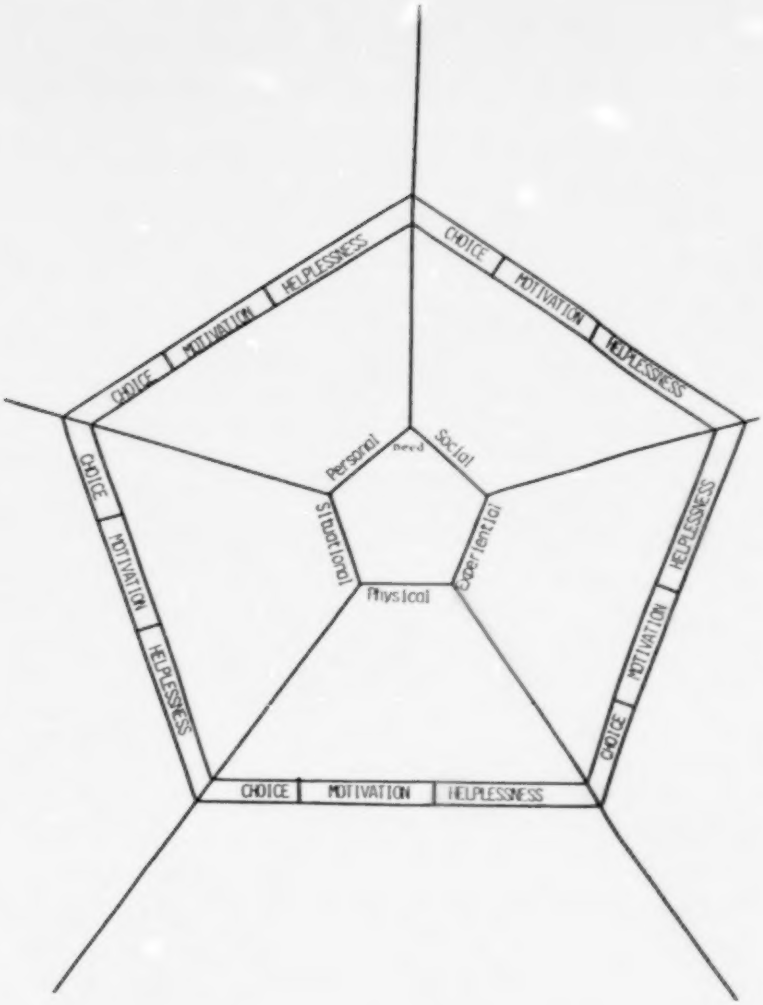
- identify predominant needs (in the centre)
- identify ecological constraints, i.e. the problems in the person's environments which may stand in the way to meeting those needs
- assess the permeability of the boundaries around these constraints, i.e. the potential for change within the constraint, and
- identify ways and means of overcoming the constraints which have been identified.

Problem Solving

This model is based on a problem solving approach which assumes that life is a problem solving process - a natural struggle towards better ways of coping with one's environment. A problem solving approach is coherent with a remedial model in that it views much of abnormal behaviour as a failure in the individual to solve problems in an appropriate way due to lack of motivation, capacity or opportunity. It is felt that if the individual learns to change aspects of negative life experiences in environmental circumstances his self-image and sense of well being will be enhanced. The goal of a problem solving strategy is to teach the individual to be an effective problem solver. As Perlman states "it aims not at the total amelioration or elimination of stresses and tensions, but at setting in motion ways of more successfully or more satisfactorily coping with them" (Perlman, 1970, p. 175). In addition, the process of problem solving is taught so that it can be used to deal with future problems. Within this model the counsellor

FIGURE 1

SOCIAL ACTION APPROA
PLANNING MA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CHOICE
MOTIVATION
HELPLESSNESS
Personal
need
Social
Situational
Experiential
Physical

is seen as a community and agency resource person who acts on behalf of the client rather than the traditional role of therapist. The individual is encouraged to focus on a problem and then to break the problem down into manageable part, to specify these components in operational terms, to identify the personal and environmental conditions affecting the problems, to identify all possible courses of action to set obtainable short term goals and to make use of the resources of the agency and community.

Constraints - A Social Action Reality

The proposed model differs in a small but important feature in that it builds not from a problem, but from a need, and rather than identifying steps or task analysing that need into manageable parts, it recognizes that some of the reasons for failure to meet needs rests not in capacity, but in the countervailing constraints within the person's life space which need to be identified and addressed first. The model proposed is therefore foreign to counsellors, who have been trained within an incremental learning model and to individuals who have learned to see the problems as inherent within themselves rather than as part of their social environment. By legitimizing the influence of external constraints, one creates an atmosphere of alignment between the counsellor and the individual which places the responsibility for the disabling condition firmly in the hands of the person with the disability. Five constraint domains have been identified.

Social Constraints - those which relate to interactions with people who impact upon the need. Examples of constraints might be - no support network, friends who encourage deviate behaviour, parents who overprotect. Loneliness or lack of personal support network becomes a major constraint as school friends move on and few avenues exist for developing relationships. Disabled young adults are often left without relevant peers as models of success and reflectors of changing identity. The struggle to find employment is often undertaken as a means of meeting people and finding friends. Recognition of the primacy of the need for a reference/support group is therefore important in any counselling situation.

Experiential Constraints - skills which need to be learned or past behaviours which need to be unlearned. The problems of youth in securing job experience are exacerbated for disabled youth. Our experience with disabled university students has shown that almost none have had after-school or summer jobs. Education without work experience handicaps even the best trained graduate. In order to overcome this problem, education systems must provide technical and personal supports to encourage disabled youth to secure work experience - through work experience programs at the high school level summer work experience and co-operative education alternatives within post secondary education. Volunteer experience is an essential component of work experience, therefore youth volunteer programs should be supported to include all youth.

Physical Constraints - physical barriers include both personal and environmental. Personal constraints include chronic fatigue, overweight, alcohol abuse, health problems or physical handicaps. Environmental barriers are the easiest to identify as they relate to lack of physical access to the experiences and settings that are related to their needs.

Situational Constraints - these are limiting factors inherent in the procedures and policies related to that need, such as rules, resistance to change, policy, funding restraints, etc. Handicapped children in our society are, in general, well cared for, but disabled adults are a low priority in our adult health services. Access to allied health professionals and technical aids decreases sharply at the transition time to adulthood - e.g. electric wheelchairs must be purchased by service clubs or private donations for an adult, but are more readily available for children. The constraints caused by this loss of service and alternatives need to be addressed realistically before employment options are investigated.

At present, integration has produced an unexpected constraint - since most disabled teens who are integrated into high schools have lost access to the special education support system. Career counsellors, overwhelmed with more prominent minorities with special needs, feel unable to provide adequate career direction in light of the failures of existing career choice systems (e.g. CHOICES consistently eliminates most career alternatives in the face of physical limitations). Many disabled teens are counselled into maintaining their low expectations, or encouraged to continue in school almost as an alternative to work.

At the present time, youth leaving post secondary education can use traditional placement services, vocational rehabilitation programs or, in some cases, specialized youth placement. However, the lack of work experience places them at the bottom of placement priorities and transfers them into vocational rehabilitation settings. For most this is an alien experience - being in a segregated environment with a wide range of ages and disabilities. Youth seldom last long in sheltered settings unless they have literally no alternative - a survey of young adults in a training centre led most to choose "no place else to go" as the reason for attending.

Left to drift into long term disability benefits, these young people are becoming casualties of our hopes. New programs, such as the Canadian Employment and Immigration Commission Entry/Re-entry Program, which promote creative work experiences and off-site training alternatives, provide important new initiatives.

Personal Constraints - this area involves feelings about oneself, including self esteem and guilt or depression over perceived incompetence, isolation or loneliness. This area may be the most difficult to assess honestly in terms of concerns and needs.

Disabled youth need successful disabled adults on which to model their behaviour. This has been a major impetus of change for women and ethnic minorities - "if she can - I can". Our focus on integration, while increasing the quality of educational experience, has done so at the expense of peer models. For example, there has been concern expressed by the adult deaf community that integration leads to a process of cultural dissolution. Similar concerns are expressed by young students who have been taught not to associate with their disabled peers, but are questioning whether they are, in fact, going to become normal like their role models.

An understanding of personal growth stems from research into the developmental process and documentation of natural history - of disabled youth who have been in integrated school systems who are now entering adulthood. In this case we have neither. It is a crucial area for practical and partnership research, if we are to build the base of knowledge for future generations of counsellors and adolescents who are disabled.

The emergence of Independent Living Centres, based on peer support and social action, could become a powerful antidote to the confused identity disabled teens experience. The Centres reinforce the capacity and potential for independent living by building on common experience. There is also potential for peer support options among teens that could help build social and personal support networks.

If the identification of constraints' component is done in a group situation, care must be taken not to expose personal sensitivities by forcing disclosure and

FIGURE 2

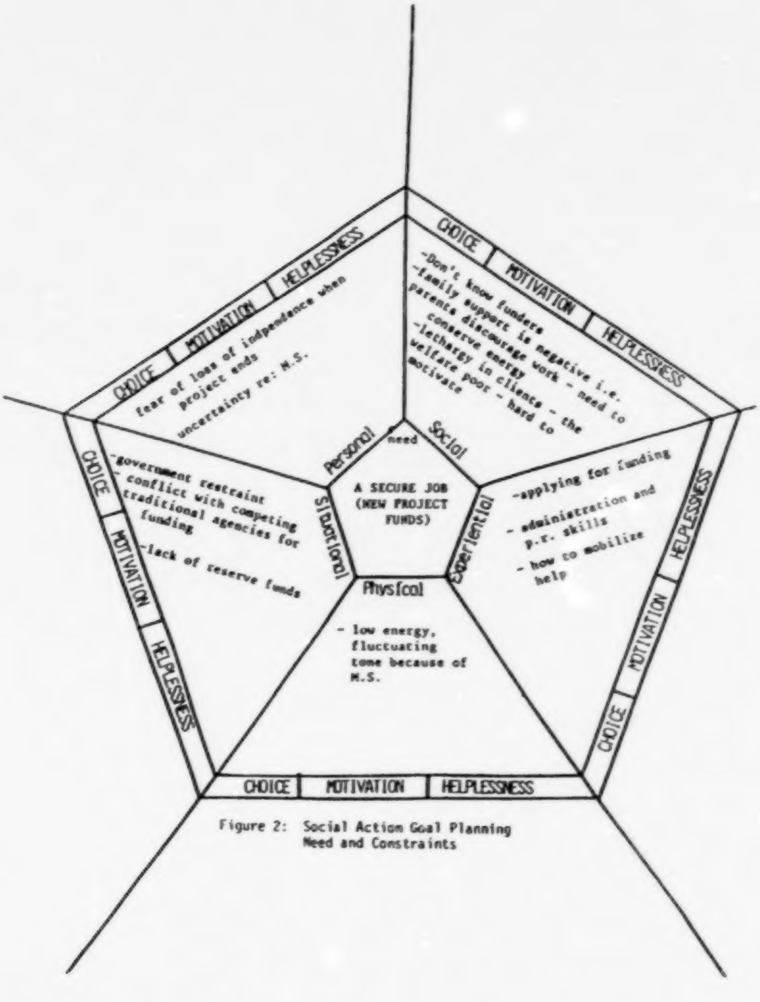

A SECURE JOB
(NEW PROJECT
FUNDS)
need
Personal
Social
Experiential
Physical
Situational
fear of loss of indpendence when project ends
uncertainty re: M.S.
-Don't know funders
-family support is negative i.e. parents discourage work - need to conserve energy
-lethargy in clients - the welfare poor - hard to motivate
-applying for funding
- administration and p.r. skills
- how to mobilize help
- low energy, fluctuating tone because of M.S.
-government restraint
- conflict with competing traditional agencies for funding
-lack of reserve funds
CHOICE
MOTIVATION
HELPLESSNESS
CHOICE
MOTIVATION
HELPLESSNESS
HELPLESSNESS
MOTIVATION
CHOICE
CHOICE
MOTIVATION
HELPLESSNESS
CHOICE
MOTIVATION
HELPLESSNESS

Figure 2: Social Action Goal Planning
Need and Constraints

sharing of segments of the Web until the tentativeness and lack of trust have been overcome.

Overcoming Constraints

The next step in the process of completing a personal "Getting There Web" is self identification of the degree to which factors such as locus of control, motivation and learned helplessness impacts each of the constraints examined. In effect this process identifies the degree of permeability of the psychological boundaries around the constraint domains. In order to make this process concrete, the three factors are called gates, i.e. a gate to open if there is good permeability and the person feels able to deal with the constraint - good motivation, internal locus of control and has had previous success in the area. The gate is closed (shaded in) if the person feels unable to deal with the constraint: passive acceptance or panic at the thought of the constraint, external locus of control, or previous failure in overcoming these constraints. Once this is completed, the counsellor directs attention to the areas in which fewest gates are closed i.e. the domain in which change is most likely to take place, and energies can most efficiently be focused. These three components were identified after much trial and error as three very distinct reasons why people may be unable to address the constraints within their lives.

Imposition versus choice - This is a simplified translation of locus of control. If people feel that they have choice or control over a constraint they will be more likely to be willing to tackle the constraint identified. If, on the other hand, the individual sees the constraint as external to him, that is having no choice or control over the issue (e.g. genetics, city policy), then the ability to deal with the constraint may be restricted. The realistic identification of constraints over which the individual has no control is an important step in the assessment process. The acceptance of the externality of locus of control, in some situations, is a healthy and productive process. It reflects the Alcoholics Anonymous creed - "to change what can be changed, to accept those things which cannot be changed and to know the difference between the two". The symbolic act of closing a gate because of the recognition of little personal control over a constraint often frees energy to be diverted into other constraints which have better potential for personal impact.

Motivation - This section is based on a premise that there is a facilitating mid range of anxiety and that either too little or too much motivation can be a debilitating influence. In order to be able to move to overcome an obstacle or a constraint one must be concerned or angry that the constraint exists. Anger that is directed can be a powerful motivator. Low interest or low motivation is a common problem when people have not seen themselves as actors in situations.

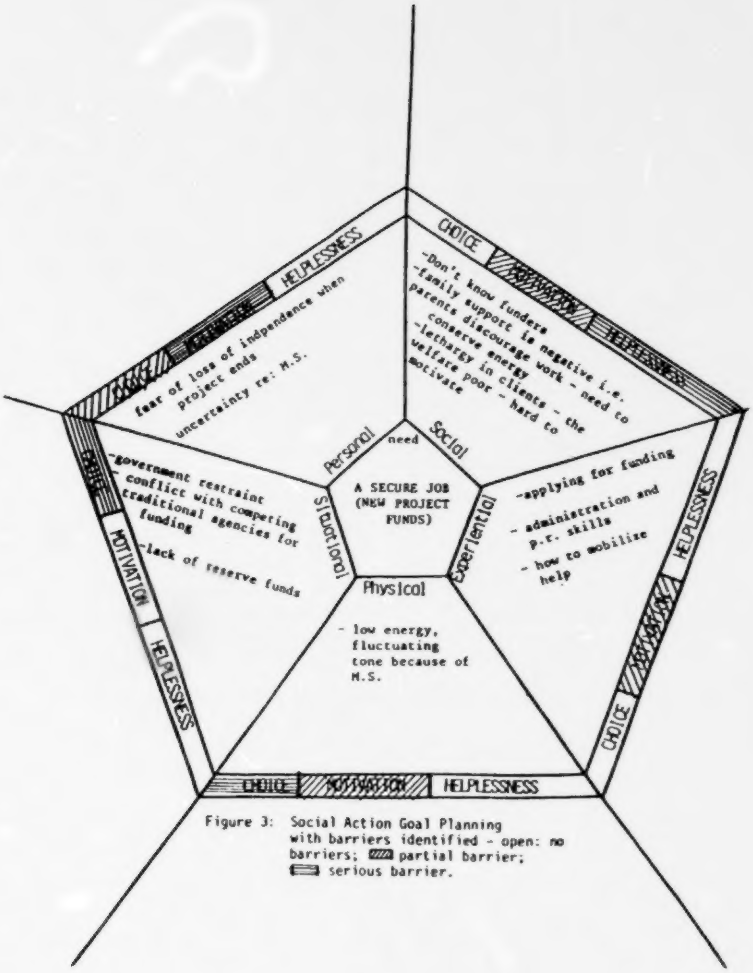
Low motivation can be a deterrent to dealing with constraints when the person comes to accept the constraint and learns to live with it even when he has a choice in effecting a solution. On the other hand, individuals are sometimes so concerned about constraints that they become immobilized through fear, anxiety and even panic. This level of anxiety becomes a deterrent to dealing with the constraint effectively, and the individual is encouraged to close the gate in that particular area and thereby divert his attention to other domains.

Learned Helplessness - This is based on previous experience in handling situations that are similar to the one identified in the constraint. If individuals feel helpless, i.e. have not experienced success in similar situations, then the gate is considered closed. However, if the individual has had success in overcoming similar constraints or feels particularly competent in that domain, then the gate would be considered open.

From this the individual can identify one or two constraints where his perceived chances of success are great in contrast to those areas where there is a perceived inability, unwillingness or ineffective motivation in dealing with the constraint. In a few rare situations individuals create barriers to overcoming constraints in all domains. However, this is a rare situation and needs to be dealt with individually as a clinical symptom. In experience to date, most individuals identify a domain where the chances of success are perceived as fairly high. This then leads to a brainstorming session regarding ways to overcome the constraints and the concrete strategies to be implemented. From this point on, the process identified in most problem solving strategies are implemented, i.e. selecting a strategy, identifying short term goals and time lines, the parties responsible, etc.

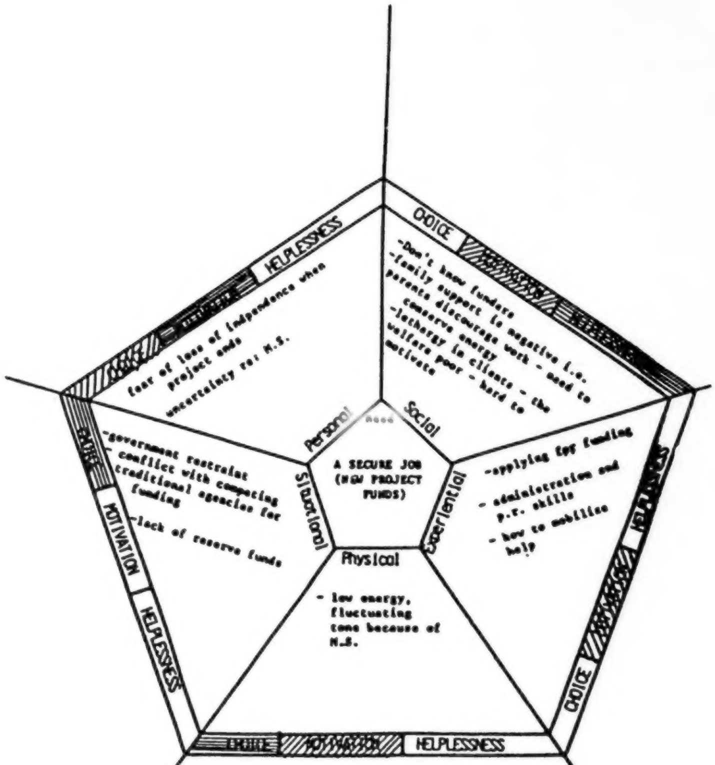
This technique has been an effective change agent for individuals who have come to blame themselves for all their failures in attaining employment, or meeting other important life needs. It effectively focuses their attention on realistic and often pervasive constraints in a manner which allows them to assess themselves and to identify directions of movement. As both an individual, and group counselling process it has been successful. It

FIGURE 3



need
A SECURE JOB (NEW PROJECT FUNDS)
Personal
Social
Experiential
Physical
Situational
CHOICE
MOTIVATION
HELPLESSNESS
fear of loss of indpendence when project ends
uncertainty re: M.S.
CHOICE
MOTIVATION
HELPLESSNESS
-Don't know funders
-family support is negative i.e. parents discourage work - need to conserve energy
-lethargy in clients - the welfare poor - hard to motivate
HELPLESSNESS
MOTIVATION
CHOICE
-applying for funding
- administration and p.r. skills
- how to mobilize help
CHOICE
MOTIVATION
HELPLESSNESS
- low energy, fluctuating tone because of M.S.
CHOICE
MOTIVATION
HELPLESSNESS
-government restraint
- conflict with competing traditional agencies for funding
-lack of reserve funds

Figure 3: Social Action Goal Planning with barriers identified - open: no barriers; ▨ partial barrier; ▤ serious barrier.


HELPLESSNESS
CHOICE
MOTIVATION
HELPLESSNESS
CHOICE
MOTIVATION
HELPLESSNESS
CHOICE
HELPLESSNESS
Personal
Need
Social
Experiential
Physical
Situational
A SECURE JOB (NEW PROJECT FUNDS)
fear of loss of independence when project ends
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- administration and p.r. skills
- how to mobilize help
- low energy, fluctuating tone because of M.S.
-government restraint
- conflict with competing traditional agencies for funding
-lack of reserve funds

Figure 4: Results of brain-storming for ways to overcome obstacles in the two most open domains.

#1 Sign up for United Way course on "granting" skills. Find grad student to help.
- Set Goals for parts of the project.

#2 Invite agency people to help with funding proposal as way of "breaking the ice".
Find way to co-operate in services.

has also been used as a program evaluation tool and a planning strategy. This work is being used as the base for an ecological study of disabled youth in transition. Self-directed training packages are one anticipated outcome of this research.

A social action approach is within the grasp of all rehabilitation counsellors should they choose to try it. It involves a dramatic reorganization of program structure and the use of social action assessment and problem solving tools. When working within a social action perspective, the counsellor's relationship to the disabled individual becomes one of an advocate and collaborator, rather than an expert. This can reverse the dependent relationship between counsellor and the person with the disability to one in which the individual gains power. Both are considered as equals, with the individual bringing his knowledge of his own disability and the context that he must live in, and the counsellor providing the guidance and support needed to assist the individual to set his own course.

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